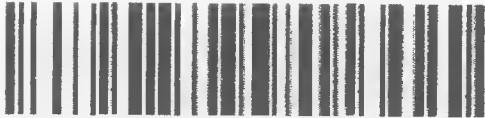


Cortland County - State of New York
ELIZABETH LARKIN - CORTLAND COUNTY CLERK
46 GREENBUSH STREET, SUITE 105
CORTLAND, NY 13045
COUNTY CLERKS RECORDING PAGE
THIS PAGE IS PART OF THE INSTRUMENT



RECEIPT NO. : 200812368

Instr #: 2008-04711
Rec Date: 08/12/2008 02:06:55 PM
Doc Grp: RP
Descrip: LEASE
Num Pgs: 90

Party1: NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
Party2: CHESAPEAKE APPALACHIA LLC

Recording:

Cover Page	10.00
Recording Fee	5.00
Per Page Fee	267.00
Cultural Ed	14.25
Records Management - Coun	1.00
Records Management - Stat	4.75
TP584	5.00
Revenue Stamp Amount	0.00

Total: 307.00

**** NOTICE: THIS IS NOT A BILL ****

***** Transfer Tax *****

Transfer Tax# : 92

Consideration:	1.00
Transfer Tax:	0.00

Record and Return To:

CHESAPEAKE APPALACHIA LLC
900 PENNSYLVANIA AVENUE
CHARLESTON WV 25302



Elizabeth Larkin

Cortland County Clerk

1239042.000

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Revenue Competitive Contract - Oil and Gas Lease - Cortland SRA # 1
CONTRACT X005043

This Lease entered into between the NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (hereinafter referred to as the Department), with offices at 625 Broadway-3rd Floor, Albany, New York 12233, and Chesapeake Appalachia, LLC (hereinafter referred to as the Lessee), with offices at P.O. Box 6070, Charleston, WV 25362-0070.

WITNESSTH:

WHEREAS the Department has jurisdiction over and is responsible for the protection of the environmental resources of the State; and

WHEREAS the need for this Lease has been identified and falls under the jurisdiction of the Department;

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties agree as follows:

ARTICLE 1: The scope of this Lease is as defined in **ARTICLE 2: SCOPE OF WORK** of the Invitation for Bid (IFB).

ARTICLE 2: The total Lease amount for the first year of the Primary Term is \$779,808.64 as stated in Schedule 2, the Bid Form, submitted by the Lessee. The schedule for further payments is defined in Schedule 1, the IFB and Article 5 of this Lease. The Lessee shall make checks payable to the New York State Department of Environmental Conservation and forward the checks to the Department's contact person named in **ARTICLE 6** of this Lease.

The Department, for and in consideration of the bonus payment of Seven hundred seventy-nine thousand, eight hundred eight & 64/100 dollars (\$779,808.64) which represents eight hundred thirty-two dollars (\$832.00) per acre, the sums, royalties, covenants, stipulations and conditions hereinafter contained and hereby agreed to be paid, observed and performed by the Lessee, does hereby demise, grant, lease and let unto the Lessee all the oil deposits and natural gas, in or under all that tract or parcel of the following described land situate in Cortland County, Town of Scott, to wit:

Cortland State Reforestation Area # 1

200812368

2008-04711
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90 Pages
LEASE

Elizabeth Larkin, County Clerk

containing nine hundred thirty-seven & 27/100 (937.27) acres more or less, hereinafter referred to as the "Property".

All sums due the Department under this Lease shall be a first lien on the implements, tools, and movable machinery or personal chattels used in operating the Property, and also upon all the unsold Oil and/or Gas obtained from the Property as security for the payment of said sums.

ARTICLE 3: The term of this Lease shall be for a period of five years, from November 15, 2006 to November 15, 2011, hereinafter referred to as the Primary Term, and subject to the other provisions herein contained, shall be effective upon approval by the Office of the State Comptroller, if the Lease amount exceeds \$10,000. The Primary Term of the Lease may be amended and/or extended for a maximum of two additional one-year periods, upon the mutual written consent of both parties and upon approval by the Office of the State Comptroller, if the Lease amount exceeds \$10,000.

The Lease shall enter an additional term upon production of oil and/or natural gas from the Property, hereinafter referred to as the Secondary Term. The Secondary Term of the Lease shall continue thereafter for as long as oil and/or natural gas is or can be produced from the Property in commercially paying quantities.

ARTICLE 4: This Lease consists of the following documents in the following order of precedence:

1. Appendix A
2. Appendix B
3. The Lease (including schedules, attachments, and performance bond, if applicable)
4. The Bid
5. The Invitation for Bid

ARTICLE 5:

A. The Lessee covenants and agrees that:

During the Primary Term of the Lease:

1. Lessee shall pay to the Department an Annual Delay Rental in accordance with the provisions detailed in Article 5B of the Lease. The bonus payment is the first year's Annual Delay Rental payment.

During the Secondary Term of the Lease:

1. Lessee shall pay to the Department, as royalty, a sum equal to the value, at the field price per barrel, of one-eighth (1/8) part of all oil, distillate, condensate, natural gasoline or other liquid hydrocarbons, hereinafter referred to as "Oil", measured at the wellhead, produced from the Property and delivered into the pipeline or storage tanks to which the well is connected, without deduction for exploration, production, operation or other costs of Lessee, the field price being that which prevails in that area on the day the Oil is delivered into the pipeline or storage tanks. Payments or royalty for oil marketed during any calendar month are to be made on or about the 30th day of the following month.

2. Lessee shall pay to the Department, as royalty, a sum equal to one-eighth (1/8) of the Lease price of all natural gas, casinghead gas or other gaseous substance, hereinafter referred to as "Gas", produced from the Property, measured at the wellhead on the date delivered to the purchaser of the Gas or sold or used off the Property or used in the manufacturing of gasoline or other products therefrom, without deduction for exploration, production, operation or other costs of Lessee. Payments or royalty for gas marketed during any calendar month are to be made on or about the 30th day of the following month.

3. Where the royalties payable under subparagraphs (a) and (b) above do not in any year equal or exceed the sum of five dollars (\$5.00) per acre of the Property per year, Lessee shall pay to the Department with respect to such year an amount equal to such sum.

These payments shall be remitted not less frequently than once per year nor more frequently than once per month and shall be accompanied by a sworn statement of the Lessee, its manager or other authorized agent in such form as may be prescribed by the Department which shall provide an itemized accounting of Oil and/or Gas produced from each well, the gross amounts of Oil and/or Gas produced since the last report, the market value of Oil on the applicable delivery dates and the Lease price of Gas during the applicable Lease periods. The schedule for these payments shall be established at the applicable time and shall be subject to annual revision. Copies of current and applicable gas sales contracts shall be provided to Department for its files as they are entered into.

For each producing well completed on the Property, Lessee shall install and properly maintain, at its expense, adequate and correct meters for the purpose of measuring, recording and reporting all hydrocarbons produced from the Property. For the producing life of this Lease and five years thereafter, Lessee shall keep and maintain records of all production meters associated with this Lease, including, but not limited to, inspections, calibrations, adjustments, repairs, replacements, integration records and integration reports. Originals, true copies or duplicates shall be kept or made available for examination within this state by the Department or its agents at all reasonable times.

- B. If operations for drilling are not commenced on the Property on or before one year after the effective date of this lease, this Lease shall then terminate as to both parties, unless on

or before that date Lessee shall pay to the Department the sum of five dollars (\$5.00) per acre of the Property for the second year and for each remaining year of the Primary Term, hereinafter referred to as the "Annual Delay Rental", which shall permit the operator to defer commencement of drilling operations for successive periods of twelve (12) months each during the life of the Primary Term. The payment of Annual Delay Rental shall be mailed or delivered to Department on or before one year after the effective date of this lease or any anniversary thereof, hereinafter referred to as the "Annual Delay Rental payment date." Drilling operations herein shall be deemed to be commenced when a new well is "spudded in" or an existing well is re-entered for workover, deepening or plugging back in a continuous effort to reestablish production or obtain new production of oil or gas. Lessee may, at any time, upon 30 days written notice to the Department and subject to the Department's approval, execute and deliver to the Department a release or releases covering any portion or portions of the Property and thereby surrender this Lease as to such portion or portions and be relieved of all obligations as to the acreage surrendered, and thereafter, if such surrender be within the Primary Term, the Annual Delay Rentals payable hereunder shall be reduced in the proportion that the acreage covered hereby is reduced by said release or releases.

- C. If, after operations have commenced but prior to discovery of Oil or Gas on the Property, Lessee drills a dry hole thereon or if, after discovery of Oil or Gas, the production thereof ceases for any reason, other than from one or more of the causes set forth in Appendix B XVI, this Lease shall terminate as to both parties unless Lessee commences additional drilling or reworking operations within ninety (90) days after completion of such dry hole or cessation of production or commences or resumes the payment of Annual Delay Rental on the next succeeding Annual Delay Rental payment date.
- D. If, at the expiration of the Primary Term, Oil or Gas is not being produced on the Property, this Lease shall terminate, but if Lessee is then engaged in maintenance drilling or redrilling operations thereon, this Lease shall remain in effect so long as any drilling or redrilling operations are prosecuted on the Property, with no interval of more than ninety (90) consecutive days during which no drilling or redrilling operations are conducted on the Property and, if such operations result in the continued production of Oil or Gas, so long thereafter as Oil or Gas in commercially paying quantities is produced from the Property.
- E. All tools, derricks, boilers, boiler houses, buildings, pipelines, pumping and drilling equipment, tanks, engines and machinery, and the casing of all dry or exhausted wells, shall remain the property of the Lessee, and shall be removed at any time prior to or within ninety (90) days after termination of the Lease. Lessee shall not permit any nuisance to be maintained on the Property. Lessee shall not use the Property for any purpose other than those authorized in the Lease, and before abandoning any well, Lessee shall securely plug the same in accordance with the rules and regulations of the Department.

- F. The Lessee agrees not to assign, transfer or convey, sublet or otherwise dispose of this Lease or any of its contents or of its rights, title or interest therein or of its power to execute the Lease to any other person, company or corporation without the previous consent in writing of the Department. With the written consent of the Department, the rights of Lessee hereunder may be assigned in whole or in part and the provisions hereof shall extend to the heirs, successors and assigns of Lessee, but no change or divisions in ownership of the Property, rentals or royalties, however accomplished, shall operate to enlarge the obligations or diminish the rights of Lessee. Should Lessee assign this Lease in whole or in part with the approval of the Department, the Department may, as to the part assigned, look solely to the assignee for the performance of all duties and obligations hereunder, whether express or implied.

ARTICLE 6: Wherever it is provided in this Lease that notice shall be given or other communications sent to the Department or the Lessee, such notices or communications shall be delivered or sent by first class mail to:

DEPARTMENT:
Charles Gilchrist
Chief, Enforcement Section
Department of Environmental Conservation
Division of Mineral Resources
625 Broadway, 3rd Floor
Albany, NY 12233-6500

LESSEE:
Marty L. Byrd, Vice President - Land
Chesapeake Appalachia, LLC
P.O. Box 6070
Charleston, WV 25362-0070

ARTICLE 7:

- A. After the occurrence of either of the following events on the Property:
- the siting, drilling, completion or abandonment of three wells on the Property by the Lessee, its successors, heirs or assigns; or
 - the discovery on the Property of producible Oil or Gas, and
- prior to the siting of any additional well locations on the Property, Lessee shall develop a well siting plan to be approved by the Department in writing. In discharging this obligation, Lessee shall plan and conduct its operations in such a manner as will minimize surface disturbance of the Property; prevent waste; and fully protect the

correlative rights of all owners and the rights of all persons, including landowners and the general public. Well spacing shall be consistent with the statutory requirements of Article 23 of the Environmental Conservation Law and its attendant regulations or any lawful spacing order issued thereunder by the Department.

- B. Lessee, at its option, and upon complete disclosure to and approval thereof by the Department of the joint agreement and plan, is hereby granted the right to unitize the acreage or any portion thereof covered by this Lease as to Oil and Gas, or either of them, contiguously with other land, lease or leases in the immediate vicinity thereof to the extent hereinafter provided, when in Lessee's judgment it is necessary or advisable to do so in order to properly prospect, develop and operate the Property in compliance with the spacing rules of the Department or when to do so would, in the judgment of Lessee, promote the conservation of Oil and Gas or either of them. Lessee under the provisions hereof may unitize acreage or any portion thereof covered by this Lease as above provided as to Oil in any one or more strata and as to Gas in any one or more strata. Units formed as to different strata need not conform in size or boundaries. The creation of units in one or more instances shall not exhaust the rights of the Lessee hereunder to unitize this Lease or portions thereof into other units. Lessee shall execute and deliver to the Department and file or record an instrument describing and designating the unit. Operations for drilling on or production of Oil or Gas from any part of a unit embracing all or part of the Property, regardless of whether such operations for drilling were commenced or such production was secured before or after the execution of the instrument designating the unit, shall be considered as operations from drilling on or production of Oil or Gas from the Property irrespective of whether the well or wells be located on the Property, and the entire acreage constituting such unit or units, as to Oil and/or Gas as herein provided, shall be treated for all purposes, except the payment of rentals and the payment of royalties on production from the unit, as if the same were included in this Lease. For the purpose of computing all royalties payable hereunder on Oil and/or Gas produced and saved from the unit, there shall be allocated to the Property and included in said unit a fractional portion of the Oil and/or Gas produced and saved from the unit after deducting that used for operations on the unit, such fraction to have as its numerator the number of surface acres constituting the Property and included in said unit and as its denominator the number of surface acres included in the unit. Royalties hereunder shall be computed on the portion of such production, whether it be Oil and/or Gas, so allocated to the Property and included in the unit, just as though such production were from the Property. The creation of a unit or units shall not have the effect of changing the ownership of the Property or the amount of rental which may become payable under this Lease. A unit may be dissolved by Lessee at any time when there is not a unit well thereon producing or capable of producing Oil and/or Gas in paying quantities.

ARTICLE 8: The Lessee shall carry on the development and operations in a professional manner, commit no waste on the Property and suffer none to be committed thereon, exercise proper care of the Property, and promptly surrender and return the Property upon termination of this Lease to the Department in a condition that in so far as possible is the same as at the

commencement of this Lease, excepting natural changes.

ARTICLE 9: The Lessee shall keep an accurate account of all drilling operations. Accurate and reliable information concerning all wells and their production, operation, and management shall be furnished to the Department upon demand. The said Lessee shall also keep an accurate account showing the sales, prices, dates, purchases and whole amount of Oil and/or Gas produced. The Department and the Comptroller of the State of New York or any of their duly authorized representatives shall have access to any of the Lessee's books, documents, papers and records directly pertinent to the subject matter of this Lease for the purpose of making audits, examination, excerpts or transcripts.

ARTICLE 10: This Lease is not, in and of itself, an authorization to drill. Issuance of drilling permits for specific locations are subject to separate application to and approval by the Department pursuant to the policies and provisions of the Environmental Conservation Law (ECL) of the State of New York.

- A. In all activities of exploration, prospecting, extraction, piping, removal and other occupation and use of the Property, the Lessee shall be subject to the direction and control of the Department in so far as may be necessary to achieve compliance with the policies and provisions of the ECL, as from time to time may be in effect, and rules and regulations issued thereunder. All work associated with prospecting for oil and gas, the drilling of wells and the laying of pipes shall be approved by the Department in writing in order to minimize damage to the natural resources contained in the Property. Prior to the drilling of any well by Lessee, the Department or its representative shall, upon application of the Lessee, designate the location of such well, the area to be occupied surrounding the well location and the rights-of-way necessary for ingress and egress to such well and for pipes necessary to be used for the purpose of conveying Oil and/or Gas from such location and for conducting water necessary in the operation of such well. Access to the property may be limited or restricted by the Department during periods of wet weather and muddy conditions. The Department shall similarly designate such rights-of-way as may be necessary to convey Oil and/or Gas across the Property from land adjacent thereto owned by or leased by the Lessee and unitized with the Property pursuant to Article 7(b) above. Such rights-of-way, to be used by the Lessee during the life of the Lease only, and no longer, shall be maintained, to the satisfaction of the Department, in good operable condition pursuant to the Department's Minimum Road Construction Standards and Minimum Maintenance Standards for the Development of Oil and Gas Resources on State Forest Lands (May 2000), attached hereto as Appendix C.
- B. Notwithstanding forfeiture, termination or expiration of this lease, the Lessee shall be responsible for restoration of damaged areas in a manner approved by the Department. The Lessee shall also be liable to the Department for all damage or loss to the Department in the remainder of the Property including, but not limited to, the improvements thereupon and the appurtenances and hereditament thereunto belonging, by reason of the Oil and/or Gas drilling operations hereunder, including all damages that may be caused the Department by fires on the Property, if started by the Lessee or its agents or

employees whether the same be done willfully or carelessly or accidentally. The Lessee further agrees to pay for all such damage within ten (10) days after the amount thereof is determined by the Department. The Lessee covenants and agrees to take such precautions against setting fire to the Property as the Department may require, and shall prevent the contamination of water in any manner whatsoever. The Department shall be the sole judge as to whether any such contamination is occurring or adequate precautions are being taken.

- C. In furtherance of the obligations of the Lessee under this Lease, but not by way of limitation of such obligations, the Lessee hereby agrees to observe the following conditions incident to any planned exploration, drilling or extraction activities on the Property:
1. The Lessee shall notify the Department at least thirty (30) days prior to entry upon the Property and shall obtain written permission before such entry unless the Lessee can demonstrate that such thirty-day period creates an undue hardship, but under no conditions shall the Lessee enter the Property without prior approval of the Department.
 2. Lessee shall, prior to making any disturbance to the Property, apply for and obtain from the Department a Temporary Revocable Permit (TRP) which may prescribe certain specific conditions required to protect the Property, including fish, wildlife, plant, land, air, water and recreational resources, and which may limit access to or disturbance of certain areas of the Property which, in the judgement of the Department, should not be disturbed. Authority for the issuance of a TRP is provided for in Articles 9 and 11 of the ECL for forest preserves, reforestation areas, and wildlife management areas. In furtherance of this objective, Lessee shall maintain a copy of this Lease on each drill site at all times for reference and use by its employees, and shall further provide a copy of this contract to each of its subcontractors and advise them of their obligations under its terms. The application for the TRP shall be accompanied by such plans, maps or other information as the Department may require.
 3. When it is deemed necessary in the judgment of the Department, prior to any ground disturbing activities and approval for drilling, Lessee will conduct a Stage 1 archaeological survey on the proposed disturbed area(s). After the survey is completed, conditions of approval will be formulated, if necessary, to mitigate any adverse impacts upon archaeological resources.
 4. Prior to the approval of drilling an examination will be performed by the Lessee to determine if any State or Federal listed threatened or endangered species are present. After the survey is completed, conditions of approval will be formulated, if necessary, to mitigate any adverse impacts upon threatened or endangered species.
 5. All access roads to drilling sites and all pipelines shall be constructed and subsequently maintained on routes selected and designated by the Department and in a manner approved by the Department.
 6. No trees shall be cut on the Property without the express prior approval of the Department. All trees, brush and vegetation cut during the clearing operations shall be

cut as close to the ground as practicable, but not higher than three (3) inches above the ground. All marketable forest products over four (4) inches in diameter resulting from the clearing operations shall be cut to specified lengths of not less than eight (8) feet and shall be transported to and piled at points designated by the Department. All unmarketable woody material resulting from the clearing operation shall be toplogged, chipped or buried or removed from the Property, as the Department may direct. The Lessee shall reimburse the Department for the fair market value based on appraisals prepared by the Department for all marketable forest products removed in the clearing operations but not delivered to the Department and for any other damage to the Property by the actions of the Lessee.

7. Lessee shall not damage existing boundary line or property corner markers; in the event that any such damage does occur, the Lessee shall bear the full cost of resurvey and marking.
8. No occupancy or other surface disturbance will be allowed within 250 feet of any waterbody (streams, lakes, etc.). This distance may be modified when specifically approved in writing by an authorized officer of the Department.
9. No occupancy or other surface disturbance is allowed in any wetlands without written approval from the authorized officer of the Department.
10. No occupancy or surface disturbance on slopes exceeding 15 percent is allowed without specific approval of the authorized officer of the Department.
11. Erosion control devices shall be constructed where necessary in the judgment of Department to prevent soil erosion, and shall be constructed and/or installed to the satisfaction of the Department.
12. The Department may inspect any works, structures, operations, equipment, materials or other possessions or activities of Lessee at any time.
13. At all times, Lessee shall maintain the property in a neat and orderly condition and shall not permit surplus equipment, material or debris to be stored or to accumulate on the property.
14. For areas in which unproductive test wells have been drilled or in which producing wells have been taken out of production, all access roads thereto shall be returned as nearly as possible to their original condition. At the conclusion of drilling and/or production operations, all nonessential equipment, material and debris shall be removed from the site and the site shall be restored according to a plan approved in advance by the Department.
15. The Department may require, or, upon application of Lessee, may approve the installation of Department approved gates on access roads of Lessee when and where they are deemed necessary.
16. Any and all storage tanks installed on the property shall be diked to 150 percent of their capacity. Lessee shall be responsible for prompt removal of any and all fluid accumulations.
17. Approvals under this paragraph shall be secured from the Department's Regional Supervisor of Natural Resources or his/her designated agent in the Region in which the Property is located.

ARTICLE 11: This Lease shall be subject to the Constitution and laws of the State of New

York and the applicable rules and regulations of the Department now or hereafter in force all of which are made a part and condition of this Lease; provided however, that no rules or regulations made after the execution of this Lease affecting either the length of the term hereof or the rate or royalty, or payment hereunder, shall operate to affect the terms and conditions of this Lease pertaining to the term hereof or royalties or other payments hereunder.

ARTICLE 12: In the event that Lessee fails to comply with any provision of this Lease, notwithstanding the provisions of Appendix B, paragraph I thereof, the Department may terminate this Lease at any time upon fifteen (15) days written notice. In the event of termination, Lessee shall cease work upon the expiration of such fifteen (15) day period, or such other period as the Department shall specify. The Lessee may at any time hereafter surrender and wholly terminate this Lease upon payment of any sums due hereunder, and may exercise such right by executing and delivering to Department a release covering the above-described premises.

IF THIS LEASE BECOMES FORFEITED, TERMINATED OR EXPIRES, THE LESSEE, OR IF THE LEASE HAS BEEN ASSIGNED, THE ASSIGNEE, IS REQUIRED TO PROVIDE A DOCUMENT CANCELING THE LEASE AS OF RECORD, AT NO COST TO THE CURRENT LANDOWNER. IF THE LESSEE OR ASSIGNEE FAILS TO CANCEL THE LEASE, THE CURRENT LANDOWNER MAY COMPEL A CANCELLATION PURSUANT TO SECTION 15-304 OF THE GENERAL OBLIGATIONS LAW.

ARTICLE 13: The Department shall continue to have the full right to administer, control, manage, protect, maintain, develop and utilize the Property, and the natural resources thereof other than Oil and Gas, as though this Lease had not been made; but in so doing will, in so far as practicable, avoid doing any damage to any of the structures or equipment of the Lessee.

ARTICLE 14: It is hereby fully and mutually understood and agreed that no rights are granted in this Lease which shall be in any way so construed as to impair the powers or duties of the Department or its representatives in the execution of the Environmental Conservation Law of the State of New York.

ARTICLE 15: SPECIAL CONDITIONS (If none adopted, enter NONE).

Occupancy or other surface disturbance of any type may be limited at certain times of the year, including the first weeks of turkey and deer hunting seasons, due to high recreational use of the area by the general public or due to wet weather and muddy conditions. The Department will determine on a site specific basis the appropriate time when occupancy or other surface disturbance activities may take place.

No occupancy or other surface disturbance will be allowed which will result in alteration or degradation of the historically significant hand built stone arch bridge.

No occupancy or other surface disturbance will be allowed in the northwest section of this forest, west of Brake Hill Road, located in the Skaneateles Lake watershed, and as shown on the Exhibit

B map, without specific written approval by the Department.

Excluded acres as shown on Exhibit B include slopes greater than 15 percent and require specific written approval by the Department for surface entry of any type.

Cultural Resource Surveys - Prior to applying for a drilling permit, the applicant may be required by the Department to complete and submit to the Department, a Stage 1A (literature search and sensitivity assessment) cultural resource study for the general area in which drilling and other construction activities are likely to occur. The area of study shall be large enough to encompass alternative well pad, access road and gathering line locations. This work shall include an archaeological sensitivity assessment for the proposed project area. If the Stage 1A study concludes that the project area is not archeologically sensitive, no further action is necessary.

If any construction, excavation or other earth moving are proposed for any areas identified as archaeologically sensitive in the Stage 1A assessment, a Stage 1B (*field investigation*) survey shall be completed prior to the submission of the drilling permit application. The Stage 1B report shall be submitted as a part of the drilling permit application. If the Stage 1B survey identifies no cultural resources, no further action is required. If resources are identified in the Stage 1B survey, additional investigations or changes in project siting or planning may be required by the Department.

The Department shall have 30 days to comment on and issue final approval of the Stage 1A and 1B reports, including additional investigations or changes in project siting. The reports and/or changes shall be considered approved if the Department fails to comment within this time frame. All cultural resource work shall be completed by an archaeologist who meets the 36 CFR 61 standards and shall fully comply with the New York Archaeological Council Standards for Cultural Resource Investigations and Curation of Archaeological Collections.

Well Site Development - if the proposed drilling of a fourth or subsequent well on the Property will result in the clearing of a new well site location (drilling pad) and access road such that the drilling pad density on the Property would exceed one (1) drilling pad per three hundred and twenty (320) acres; the Lessee shall, prior to any further drilling pad and access road construction on the Property, submit a drilling pad development plan for the Department's approval which will minimize the surface disturbance of the Property. The plan shall identify, on a well by well basis, specific techniques to be employed to keep surface impacts to a minimum and reduce segmentation of the Property while remaining consistent with the well spacing requirements of Article 23 of the Environmental Conservation Law and its attendant regulations. Techniques to achieve the above stated objective shall primarily rely on, but, subject to Department approval, shall not be limited to:

- use of existing roads,
- locating new well pads adjacent to existing roads,
- expanding existing well pads to accommodate additional wells, and
- directional drilling one or more wells from an existing or new pad.

Any variation from the final approved plan must be approved by the Department in writing.

Department Contact:

Charles Gilchrist
NYS Department of Environmental Conservation
Division of Mineral Resources
625 Broadway, 3rd Floor
Albany, New York 12233-6500

Lessee:

Name: Marty L. Byrd, Vice President - Land
Chesapeake Appalachia, LLC

Address: P.O. Box 6070
Charleston, WV 25362-0070

Federal Identification No. 20-3774650

Portland 1

SIGNATURE PAGE

Contract X005043

Agency Certification:

"In addition to the acceptance of this Lease, I also certify that original copies of this signature page will be attached to all other exact copies of this Lease."

LESSEE SIGNATURE:

Marty L. Bell
TITLE: Vice President - Land
DATED: 9/19/2006

AGENCY SIGNATURE:

NYSDEC: [Signature]
TITLE: DIRECTOR OF MANAGEMENT & BUDGET SVCS
DATED: 1/12/07

ATTORNEY GENERAL'S
SIGNATURE:

[Signature]
APPROVED AS TO FORM
NYS ATTORNEY GENERAL
FEB 02 2007
DATED: [Signature]
PETER FAVRETTO
ASSOCIATE ATTORNEY

COMPTROLLER'S SIGNATURE:

[Signature]
APPROVED
DEPT. OF AUDIT & CONTROL
MAR 22 2007
DATED: [Signature]
FOR THE STATE COMPTROLLER

Acknowledgment of Corporation

STATE OF WEST VIRGINIA

COUNTY OF KANAWHA

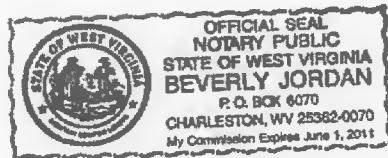
On the 19th day of September in the year 2006 before me personally came Marty L. Byrd to me known, who, being by me duly sworn, did depose and say that he/she/they reside(s) in West Virginia (if the place of residence is in a city, include the street and street number, if any, thereof); that he/she/they is (are) the Vice President (president or other officer or director or attorney in fact duly appointed) of the Chesapeake Appalachia, L.L.C. (name of corporation), the corporation described in and which executed the above instrument; and that he/she/they signed his/her/their name(s) thereto by authority of the board of directors of said corporation.

Beverly Jordan

Notary Public

Printed Name: Beverly Jordan

My Commission Expires: 6-1-2011



STATE OF NEW YORK)

) ss.:

COUNTY OF ALBANY)

On this 12th day of January, 2007, before me, the subscriber personally appeared Nancy W. Lussier to me known to be a **DIRECTOR OF MANAGEMENT & BUDGET SVCS** of the Department of Environmental Conservation of the State of New York and he duly acknowledged that he executed the same as such for and in behalf of The People of the State of New York.

Kathleen R. Tubiolo

NOTARY PUBLIC

KATHLEEN R. TUBIOLO
Notary Public, State of New York
Qualified in Schoharie County
Reg. No. 01TU6154579
Commission Expires 10/23/2010

**OIL AND GAS LEASE SPECIAL CONDITIONS
CORTLAND SRA #1 HEWITT STATE FOREST**

Occupancy or other surface disturbance of any type may be limited at certain times of the year, including the first weeks of turkey and deer hunting seasons, due to high recreational use of the area by the general public or due to wet weather and muddy conditions. The Department will determine on a site specific basis the appropriate time when occupancy or other surface disturbance activities may take place.

No occupancy or other surface disturbance will be allowed which will result in alteration or degradation of the historically significant hand built stone arch bridge.

No occupancy or other surface disturbance will be allowed in the northwest section of this forest, west of Brake Hill Road, located in the Skaneateles Lake watershed, and as shown on the Exhibit B map, without specific written approval by the Department.

Excluded acres as shown on Exhibit B include slopes greater than 15 percent and require specific written approval by the Department for surface entry of any type.

Cultural Resource Surveys - Prior to applying for a drilling permit, the applicant may be required by the Department to complete and submit to the Department, a Stage 1A (literature search and sensitivity assessment) cultural resource study for the general area in which drilling and other construction activities are likely to occur. The area of study shall be large enough to encompass alternative well pad, access road and gathering line locations. This work shall include an archaeological sensitivity assessment for the proposed project area. If the Stage 1A *study* concludes that the project area is not archeologically sensitive, no further action is necessary.

If any construction, excavation or other earth moving are proposed for any areas identified as archaeologically sensitive in the Stage 1A assessment, a Stage 1B (*field investigation*) survey shall be completed prior to the submission of the drilling permit application. The Stage 1B report shall be submitted as a part of the drilling permit application. If the Stage 1B survey identifies no cultural resources, no further action is required. If resources are identified in the Stage 1B survey, additional investigations or changes in project siting or planning may be required by the Department.

The Department shall have 30 days to comment on and issue final approval of the Stage 1A and 1B reports, including additional investigations or changes in project siting. The reports and/or changes shall be considered approved if the Department fails to comment within this time frame. All cultural resource work shall be completed by an archaeologist who meets the 36 CFR 61 standards and shall fully comply with the New York Archaeological Council Standards for Cultural Resource Investigations and Curation of Archaeological Collections.

Well Site Development - if the proposed drilling of a fourth or subsequent well on the Property will result in the clearing of a new well site location (drilling pad) and access road such that the drilling pad density on the Property would exceed one (1) drilling pad per three hundred and twenty (320) acres; the Lessee shall, prior to any further drilling pad and access road

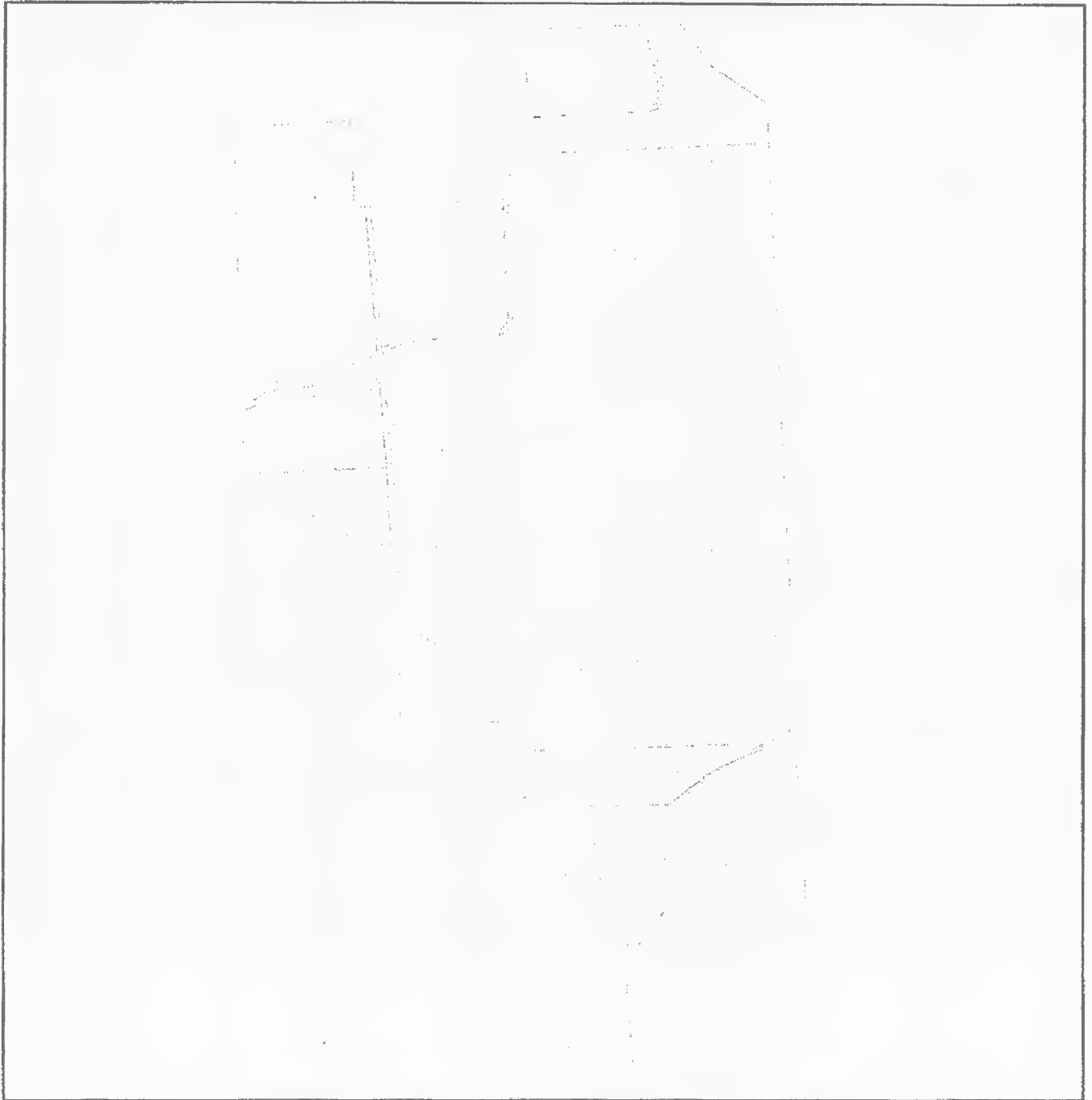
construction on the Property, submit a drilling pad development plan for the Department's approval which will minimize the surface disturbance of the Property. The plan shall identify, on a well by well basis, specific techniques to be employed to keep surface impacts to a minimum and reduce segmentation of the Property while remaining consistent with the well spacing requirements of Article 23 of the Environmental Conservation Law and its attendant regulations. Techniques to achieve the above stated objective shall primarily rely on, but, subject to Department approval, shall not be limited to:

- use of existing roads,
- locating new well pads adjacent to existing roads,
- expanding existing well pads to accommodate additional wells, and
- directional drilling one or more wells from an existing or new pad.

Any variation from the final approved plan must be approved by the Department in writing.

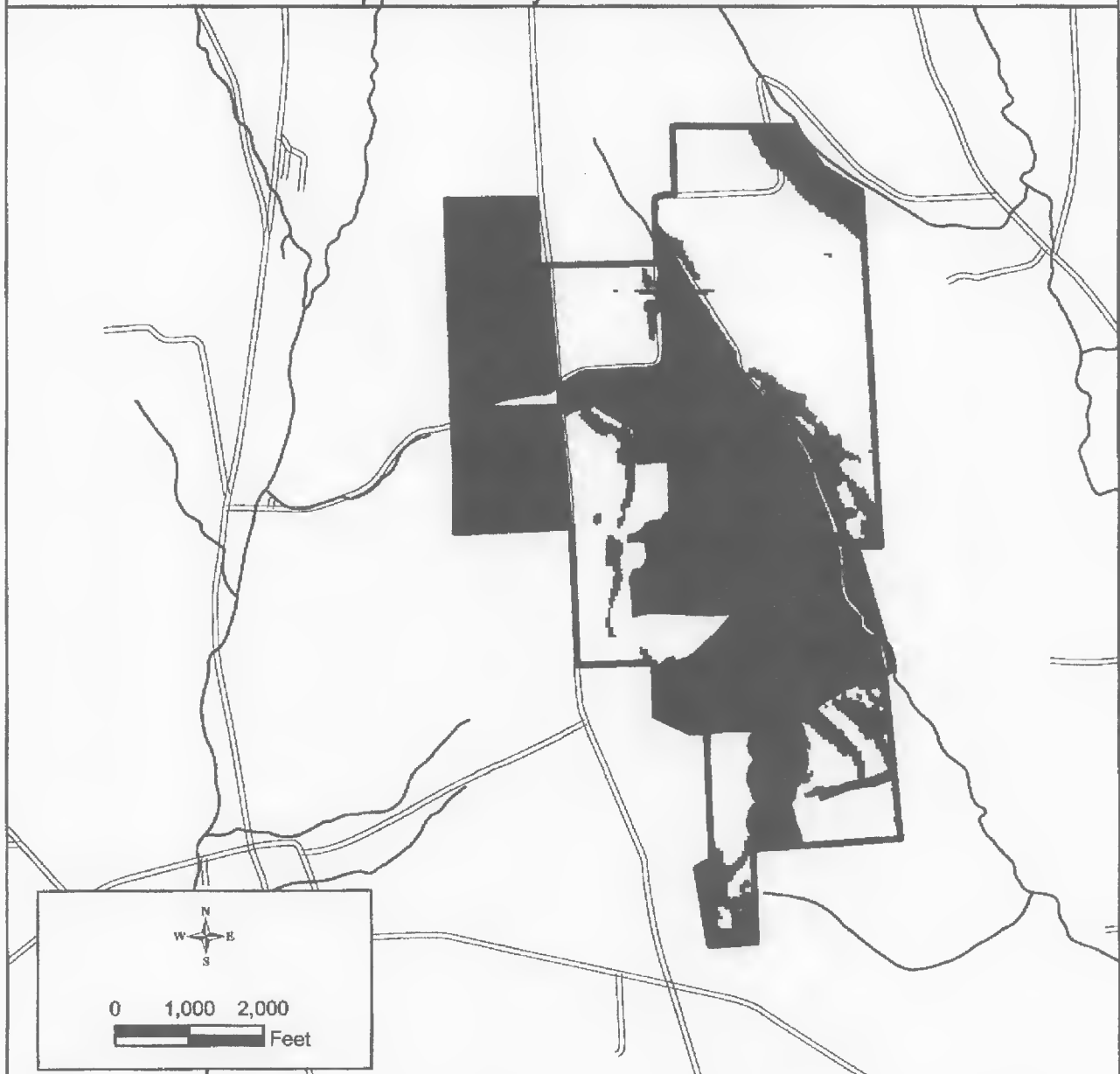
Exhibit A

Cortland State Reforestation Area # 1 - Hewitt State Forest - Approximately 937.27 Acres
New York State Department of Environmental Conservation



Source: Cortland County Tax Maps; re-projected to NAD 83, UTM Zone 18N

Cortland State Reforestation Area # 1 (Hewitt State Forest) - Exhibit B
Approximately 937 Total Acres



Map Legend

- Not compatible with well pad, road or utility development
- Only one well pad permitted per State Forest
- Compatible for well pad, road and utility development
- Designated Recreational Trails
- ==== Roads
- Streams

Required Setbacks:
 250 feet from designated recreational trails and waterbodies. Setbacks from spring seeps and cultural sites (old home sites, archeological occurrences & cemeteries) will be determined on a case by case basis.

X005043

Schedule 1

New York State Department of Environmental Conservation
Division of Mineral Resources
Bureau of Oil and Gas Regulation
625 Broadway
Albany, NY 12233-6500
(518) 402-8056

INVITATION FOR BIDS (IFB)

Name of Project: Oil and Gas Lease, Cortland SRA # 1

Contract Number: X005043

Bid Due Date: 8/23/2006, 11 a.m. local time

Release Date: 6/30/2006

ARTICLE 1: BACKGROUND

The New York State Department of Environmental Conservation (Department) is authorized by Title 11, Section 23-1101 of the Environmental Conservation Law to make leases on behalf of the State for exploration, production, and development of oil and gas on State lands other than State Parks.

ARTICLE 2: SCOPE OF WORK

The State of New York (State) is considered to be the owner of 100 percent of the oil and gas rights to Cortland SRA # 1, 937.27 acres, hereinafter referred to as the "Property", as shown on a map of said area, (attached as Exhibit A) but makes no warranty as to its ownership thereof. The Lessee assumes all risk of proving title. Should the title search reveal that the State does not own all or part of the Mineral Rights on a portion of the subject tract, proportional restitution of the initial bonus payment shall be made.

The Lessee will be granted the exclusive right to prospect for, by geophysical and other exploratory tests, extract, pipe and remove oil and natural gas, and to occupy and use only so much of the surface of the Property, as approved by the Department, as reasonably necessary to carry on the work of prospecting for, extracting, piping and removing such oil and natural gas and also the right to use, free of cost, oil and natural gas as fuel in so far as may be necessary to the development and operation of the Property. It is understood that the Department grants only those rights owned by it and, by execution of this agreement, makes no warranty or guarantee to Lessee with respect to ownership of any rights under the Property described in Exhibit A. For the purpose of determining the amount of any rentals and shut-in royalties hereunder, the number of gross acres above specified shall be deemed correct, whether actually more or less.

The Department also will grant to Lessee the right to take, with the approval of the Department, a sufficient supply of water to carry on said operations on the Property by means of pipelines or otherwise. Prior to the initiation of any activity in furtherance of such taking, the Department or its representative shall approve the amount of water necessary for such purpose, the manner and duration of its taking, and the plans and specifications for any works required in connection therewith.

Lessee is advised that, from time to time, a subject tract may be landlocked, to wit, surrounded by lands in the possession of others and that the Department can not provide or assure access to the Property for the Lessee across these lands. The Lessee shall be solely responsible for obtaining the right of access to the proposed lease area across these lands.

No underground storage rights will be granted to the Lessee under any terms of this Lease.

Following the award of this Lease, the Lessee, its successors, heirs or assigns, prior to entry on the Property for the purpose of drilling for oil or natural gas, must:

- (1) File with the Department an Organizational Report pursuant to the requirements of 6 NYCRR § 551.1 of the regulations;
- (2) Apply for and secure for each well site proposed for the Property, prior to commencement of drilling operations, a drilling permit for each site, pursuant to 6 NYCRR § 552.1 of the regulations; and
- (3) For each well site proposed, provide in a form and amount acceptable to the Department, financial security to guarantee the performance of well plugging and abandonment obligations as required pursuant to 6 NYCRR § 551 and 555 of the regulations.

All items detailed in Articles 5, 7, and 10 in the Draft Lease Contract, attached hereto as Attachment 1, are to be considered part of the scope of work of this IFB and must be adhered to by the Lessee.

ARTICLE 3: MANDATORY REQUIREMENTS

Failure of the prospective bidder to meet all mandatory requirements may result in the bid being judged non-responsive.

- a) Bids must be accompanied by a deposit of 10% of the bid amount in the form of a check or money order drawn to the New York State Department of Environmental Conservation. Said check shall be returned to all unsuccessful bidders.
- b) All bidders must complete, sign, and return the bid form, which is attached and incorporated herein as Form #1. Failure to use the attached form may result in a bid being judged non-responsive. Bidders shall bid on the basis of a bonus per acre, which amount shall pay the first year's rental; however, no bonus which is less than \$15.00 per acre will be accepted.
- c) All bidders must submit the following form, which is attached to this IFB, for a bid to be judged responsive:
 - 1) MacBride Fair Employment Principles/Non-Collusion Requirements/State Ethics Law Provision Form.

ARTICLE 4: METHOD/RESPONSE TO IFB INQUIRIES

All requests for information pertinent to the preparation and submission of the bid and this procurement process are to be made in writing to Charles Gilchrist, Department of Environmental Conservation, Chief, Compliance Enforcement Section, 625 Broadway-3rd Floor, Albany, NY 12233-6500, no later than August 2, 2006. No other Department employee is to be contacted regarding this procurement process. Written responses will be provided by mail or

facsimile by c.o.b. August 9, 2006, to all potential bidders who requested an IFB from the Department.

The Department is responsible for providing addenda or responding to questions only from those persons or firms having obtained the IFB documents from the Department. Persons or firms obtaining the IFB from sources other than the Department bear the sole responsibility for obtaining any addenda issued or responses to questions about the project. If it is necessary to revise this IFB before the due date for bids, revisions will be provided only to firms who have requested the IFB documents from The Department.

ARTICLE 5: BID SUBMITTALS

Bids are to be submitted to the Department in Albany, New York. Bids must be clearly labeled on the outside of the envelope or package with the following statement:

Bid: Oil and Gas Lease, Cortland SRA # 1
Contract No: X005043
Bid Opening Date and Time: 8/23/2006, 11 a.m.
BID - DO NOT OPEN

One original and two copies of the bid must be delivered no later than 11 a.m., local prevailing time, on 8/23/2006 to the following:

Bureau of Procurement and Expenditures
New York State Department of Environmental Conservation
625 Broadway, 10th Floor
Albany, New York 12233-5027
Attention: Debra Haswell

Please note that the above deadline is for receipt of the bid at the Department's Bureau of Procurement and Expenditures in Albany, New York, not for mailing or entrusting to a delivery service. Late bids will be returned unopened. Faxed or electronically transmitted bids will not be accepted.

Bid submissions should include:

- a. Completed Bid Form (Form # 1);
- b. MacBride Fair Employment Principles/Non-Collusion Requirements/State Ethics Law Provision Form;
- c. Bid deposit in the form of a check or money order drawn to the New York State Department of Environmental Conservation, in an amount equal to ten (10) percent of the total bonus bid. Any earnest money on deposit with the Department shall be applied to this guarantee. Said check shall be returned to all unsuccessful bidders;
- d. All items as required in Mandatory Requirements as stated in Article 3.

ARTICLE 6: SUBSEQUENT SUBMITTALS

Upon notice of potential award, the responsive bidder may be required to submit, within 30 business days of receipt of the notice, any or all of the following items:

- a. Vendor Responsibility Questionnaire
- b. New York State Tax Law § 5-A Contractor Certification Form (ST-220)
- c. Executed Lease

The requested items are to be returned, with original signatures, to the individual listed in Article 4: Method/Response to IFB Inquiries, at the address provided.

ARTICLE 7: TERM

The Primary Term of this Lease is for a period of five (5) years, with the option to amend and/or extend for a maximum of two (2) additional one-year periods upon the mutual written consent of both parties and the approval of the Office of the State Comptroller. This Lease shall provide for a Secondary Term as defined in Article 3 of the Draft Lease Contract (See **Attachment 1**). The expected start date of this Lease is October 18, 2006.

ARTICLE 8: BID CONDITIONS

Responsive: Bidders are advised that failure to use the attached forms, and to adhere to the bid requirements, instructions, conditions and timetable may result in a bid being judged non-responsive.

Offer firm for 60 days: The offer is firm and not revocable for a period of sixty days from the bid opening date. Subsequent to the expiration of the sixtieth day, the offer may be withdrawn in writing.

Non-Committal Clause: This Invitation for Bid does not commit the Department to award a contract, pay any costs incurred in the preparation of a bid in response to this IFB, or to procure or contract for services or supplies. The Department reserves the right to accept or reject any or all bids received as a result of this request, to negotiate with all qualified sources, or to cancel, in part, or in its entirety, this IFB if it is in the best interest of the Department to do so.

Standard Contract Clauses: The successful bidder will be required to comply with all of the mandatory New York State and Department contracting provisions contained in the following two attached documents:

- Appendix A - Standard Clauses for All New York State Contracts;
- Appendix B - Standard Clauses for All NYSDEC Contracts.

Road Construction and Maintenance Standards: The successful bidder may be required to comply with all of the road construction and maintenance standards contained in the following attached document:

- Appendix C - Minimum Road Construction Standards and Minimum

Maintenance Standards.

MacBride Fair Employment Principles/Non Collusion Requirements/State Ethics Law Provision Form: All offerors are required to complete the combined "Non-Collusion/Nondiscrimination in Employment in Northern Ireland: MacBride Fair Employment Principles/State Ethics Law" form attached to this IFB and to submit it as part of your bid.

Draft Lease Contract: The successful bidder will be required to sign a lease containing the same or similar provisions that are contained in the Draft Lease Contract. (see Attachment 1)

ARTICLE 9: STATE'S RESERVED RIGHTS

The State reserves the right to:

- a) Define requirements to meet agency needs and to modify, correct, and clarify requirements at any time during the process provided the changes are justified and maintain fairness in contracting with the business community;
- b) Disqualify bids that fail to meet mandatory requirements;
- c) Establish terms and conditions which must be met by all offerors and/or, where permitted by the solicitation, eliminate mandatory requirements that are not met by any offerors;
- d) Award Leases for any and all parts of the IFB in accordance with the Method of Award;
- e) Require clarification from bidders for the purpose of assuring a full and complete understanding of the solicitation requirements;
- f) Consider every offer as firm and not revocable for a period of up to sixty days from the bid opening or such other period of time specified in the solicitation. Subsequent to such sixty day or other specified period, an offer may be withdrawn in writing;
- g) Have the option to require a bond or other guarantee of performance, and to approve the amount, form and sufficiency thereof.

ARTICLE 10: FINANCIAL TERMS

No payment other than the bid deposit, which is equal to ten (10) percent of the first year's bonus payment, will be accepted at this time. The successful bidder shall remit the remaining ninety (90) percent of the first year's rental payment upon receipt of an approved copy of the Lease.

The rental rate for each succeeding year of the Primary Term of the Lease, in the absence

of commercial production, shall be five dollars (\$5.00) per acre of the Property. This same rental rate shall apply to any extensions of the Primary Term of the Lease, if the Lessee exercises the option to extend the Primary Term for additional one-year periods, as detailed in Article 7.

The Lease shall enter the Secondary Term if/when production is established. Production royalties will be a sum equal to the value of one-eighth (1/8) of all hydrocarbons produced from the Lease without deduction for exploration, production, operation or other costs of Lessee, as defined in Article 5 of the Draft Lease Contract (See Attachment 1).

Financial Security will be required for surface entry activities which require a permit from the Department, pursuant to 6 NYCRR § 551 and 555 of the regulations. The amount will be based on the projected cost of restoration or repair of State property.

All monetary references are in U.S. dollars.

ARTICLE 11: CONTRACT TERMS

Insurance Considerations:

The Lessee agrees to procure and maintain at its own expense and without expense to the Department for the entire term of this Lease and any extensions thereof, insurance of the kinds and amounts hereinafter provided by insurance companies licensed to do business in the State of New York, covering all operations under this Lease. Upon execution of this Lease, the Lessee shall furnish to the Department a certificate or certificates, in form satisfactory to the Department, showing that it has complied with this Article, which certificate or certificates shall provide that the policies shall not be changed or canceled until thirty (30) days written notice has been given to the Department. The certificate should list the Department and the State of New York as additional insured. The kinds and amounts of insurance required are as follows:

- a) Policy covering the obligations of the Lessee in accordance with the provisions of the Worker's Compensation Law, Employers Liability, and Disability Benefits. This Lease shall be void and of no effect unless the Lessee procures the Worker's Compensation policy and maintains it until acceptance of the work.
- b) Commercial General Liability Insurance with a limit of not less than \$1,000,000 each occurrence. Such insurance shall cover liability arising from premises operations, independent Contractors products-completed operations, broad form property damage, personal and advertising injury, cross liability assumed in a Contract (including tort liability of another assumed in a Contract).
- c) Comprehensive Business Automobile Liability Insurance with a limit of not less than \$1,000,000 each accident. Such insurance shall cover liability arising out of any automobile including owned, leased, hired and non-owned automobiles.
- d) The Lessee shall require that any subcontractors hired carry insurance with the same limits and provisions as provided herein.

- e) The Lessee shall require that any assignee comply with these provisions.

Tax Law § 5-A

Tax Law § 5-a, is effective with all solicitations to purchase issued by covered agencies on or after January 1, 2005. It applies to contracts where (1) the total amount of such persons' sales delivered into New York State are in excess of \$300,000 for the four quarterly periods immediately preceding the quarterly period in which the certification is made, and with respect to any affiliates, subcontractors, or affiliates of subcontractors whose sales delivered into New York State exceeded \$300,000 for the four quarterly periods immediately preceding the quarterly period in which the certification is made, and (2) the contracts or agreements with state agencies or public authorities for the sale of commodities or services have a value in excess of \$15,000. This law imposes upon certain contractors the obligation to certify whether or not the contractor, its affiliates, its subcontractors and affiliates of the subcontractors are required to register to collect state sales and compensating use tax. Where required to register, the contractor must also certify that it is, in fact, registered with the New York State Department of Taxation and Finance (DTF). The law prohibits the Comptroller, or other approving agency, from approving a contract awarded to a vendor meeting the registration requirements but who is not so registered in accordance with the law.

Upon notice of potential award, the responsive bidder may be required to submit, within 10 business days of receipt of the notice, the New York State Tax Law § 5-A Contractor Certification Forms (ST-220). Failure to respond may render a bidder non-responsive and non-responsible. Bidders shall take the necessary steps to provide properly certified forms to ensure compliance with the law.

Vendors may call the DTF at 1-800- 972-1233 for any and all questions relating to Tax Law § 5-a and relating to a company's registration status with the DTF. For additional information and frequently asked questions, please refer to the DTF web site: http://www.nystax.gov/sbc/nys_contractors.htm .

Provision for Termination and Default

- a) This Lease may be canceled or terminated by the Department, and all moneys due or to become due hereunder may be required to be paid immediately if the Lessee shall employ thereon either directly or indirectly, in any capacity, any person who at the time of such employment is also an employee of the State. No notice is required for this clause to take effect.
- b) If the Department determines that the Lessee has breached a material term of this Lease, it shall issue a notice to cure, providing the Lessee with 30 days to cure the default. If the Lessee fails to cure the defect within this time period, or fails to make a good faith effort to do so, as determined by the Department, the Department may terminate this Lease for cause.
- c) The Department shall have the right to postpone, suspend, abandon, or terminate this

Lease, and such actions shall in no event be deemed a breach of Contract. In any of these events, the Department shall make settlement with the Lessee upon an equitable basis as determined by the Department, which shall fix the value of the work which was performed by the Lessee prior to the postponement, suspension, abandonment, or termination of the Lease.

d) The Department reserves the right to terminate this Lease in the event it is found that the certification filed by the Lessee in accordance with § 5-a of the Tax Law is not timely filed during the term of the Lease or the certification furnished was intentionally false or intentionally incomplete. Upon such finding, the Department may exercise its termination right by providing written notification to the Lessee.

Freedom of Information Law Requirements: The Lessee must provide to the Department all information, records, and other written material it produces, possesses, or relies upon if such material is the object of a legitimate request to the Department pursuant to the Freedom of Information Law.

Indemnification Clause: The Lessee shall be responsible for all damage to life and property due to activities of the Lessee, its assignees, agents, or employees, in connection with its services under this Lease. This obligation is in no way limited by the enumeration of insurance coverages hereunder. Further, it is expressly understood that the Lessee shall indemnify and save harmless the Department, its officers, employees, agents, and assigns in accordance with the provisions of Appendix B, Clause II.

Nothing in this Article or in this Lease shall create or give to third parties any claim or right of action against the Lessee or the State of New York such as may legally exist irrespective of this Article or this Lease.

ARTICLE 12: METHOD OF AWARD

The Department will award this Lease to the highest responsive, responsible bidder whose bid meets all of the terms and conditions of this IFB. In cases where two or more responsible bidders submit identical high bids, the first bid received in the Bureau of Procurement and Expenditures in Albany, NY will be selected. The Department may also reject all bids, waive any technicality or informality in bidding or disallow any bid if the bidder, upon request, fails to furnish satisfactory evidence of responsibility and thereafter readvertise for new bids at its discretion. The basis for determining the award shall be documented in the Procurement Record. The response to this IFB shall be firm and not revocable for a period of sixty (60) days.

FORM # 1

Contract # X005043

BID FORM

Bids on Cortland SRA # 1, Town of Scott, Cortland County, New York which totals approximately 937.27 acres shall be entered below:

BONUS PER ACRE _____

TOTAL BONUS _____

By submission of this bid, the Bidder stipulates and agrees that he/she has carefully examined the Oil and Gas Lease, area map and applicable Rules and Regulations and that the bid is made in reliance upon said documents.

In witness whereof the bidder has executed this bid, this _____ day of _____, 20____.

Bidder Sign Here: _____

Firm Name: _____

By: _____

Address: _____

Phone # _____

Fax # _____

BIDDER'S/PROPOSER'S CERTIFICATION

**NON-COLLUSIVE BIDDING
AND
NONDISCRIMINATION IN EMPLOYMENT IN NORTHERN IRELAND
MACBRIDE FAIR EMPLOYMENT PRINCIPLES
AND
STATE ETHICS LAW PROVISION**

BY SUBMISSION OF THIS BID AND BY SIGNING HEREUNDER THE BIDDER/PROPOSER, AND EACH PERSON SIGNING ON BEHALF OF SUCH PARTY CERTIFIES, AND IN THE CASE OF A JOINT BID/PROPOSAL, EACH PARTY THERETO CERTIFIES AS TO ITS OWN ORGANIZATION, UNDER PENALTY OF PERJURY, THAT TO THE BEST OF HIS/HER KNOWLEDGE AND BELIEF:

A. NON-COLLUSION State Finance Law §139-d

1. The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
2. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and
3. No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

B. MACBRIDE FAIR EMPLOYMENT PRINCIPLES State Finance Law §165(5)

1. it or any individual or legal entity in which the bidder/proposer holds a 10% or greater ownership interest, or any individual or legal entity that holds a 10% or greater ownership in the bidder/proposer, either: (answer yes or no to one or both of the following, as applicable).
2. has business operations in Northern Ireland;
Yes _____ or No _____ (check answer) **IF YES, COMPLETE #3**
3. shall take lawful steps in good faith to conduct any business operations that it has in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to nondiscrimination in employment and freedom of workplace opportunity regarding such operations in Northern Ireland, and shall permit independent monitoring of their compliance with such Principles.
Yes _____ or No _____ (check answer)

C. STATE ETHICS LAW PROVISION

By submittal of this bid/proposal, the undersigned hereby certifies, for and on behalf of the bidder/proposer, that he is familiar with the following provisions of the State Ethics Law provisions applicable to post employment restrictions affecting former state employees: POL §73(8)(a)(i) the two year bar, and §73(8)(a)(ii), the life-time bar, and that submittal of this bid/proposal is not in violation of either provision, and that no violation will occur by entering into a contract or in performance of the contractual services, and further that the bidder/proposer recognizes that the Department may rely upon this certification

Except as follows: (attach information if needed)

(Proposer is to make full disclosure of any circumstances which could affect its ability to perform in complete compliance with the cited laws. Any questions as to the applicability of these provisions should be addressed to the New York State Ethics Commission, 39 Columbia Street, Albany, N.Y. 12207; telephone #1-800-87-ETHICS.)

NOTE: All references to "bid" "bidder" shall be deemed to include "proposer" "proposal".

Date: _____ Print Name and Title _____

Signature _____

Attachment 1 - Draft Lease Contract

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Revenue Competitive Contract - Oil and Gas Lease
CONTRACT X00xxxx

This Lease entered into between the NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (hereinafter referred to as the Department), with offices at 625 Broadway-3rd Floor, Albany, New York 12233, and (Name of Contractor) (hereinafter referred to as the Lessee), with offices at (Address of Contractor)

WITNESSTH:

WHEREAS the Department has jurisdiction over and is responsible for the protection of the environmental resources of the State; and

WHEREAS the need for this Lease has been identified and falls under the jurisdiction of the Department;

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties agree as follows:

ARTICLE 1: The scope of this Lease is as defined in ARTICLE 2: SCOPE OF WORK of the Invitation for Bid (IFB).

ARTICLE 2: The total Lease amount for the first year of the Primary Term is \$ _____ as stated in Schedule 2, the Bid Form, submitted by the Lessee. The schedule for further payments is defined in Schedule 1, the IFB and Article 5 of this Lease. The Lessee shall make checks payable to the New York State Department of Environmental Conservation and forward the checks to the Department's contact person named in ARTICLE 6 of this Lease.

The Department, for and in consideration of the bonus payment of _____ dollars (\$ _____) which represents _____ dollars (\$ _____) per acre, the sums, royalties, covenants, stipulations and conditions hereinafter contained and hereby agreed to be paid, observed and performed by the Lessee, does hereby demise, grant, lease and let unto the Lessee all the oil deposits and natural gas, in or under all that tract or parcel of the following described land situate in _____ County, Towns of _____, to wit:

Attachment 1 - Draft Lease Contract

containing _____ () acres more or less, hereinafter referred to as the "Property".

All sums due the Department under this Lease shall be a first lien on the implements, tools, and movable machinery or personal chattels used in operating the Property, and also upon all the unsold Oil and/or Gas obtained from the Property as security for the payment of said sums.

ARTICLE 3: The term of this Lease shall be for a period of five years, from month, date, year to month, date, year, hereinafter referred to as the Primary Term, and subject to the other provisions herein contained, shall be effective upon approval by the Office of the State Comptroller, if the Lease amount exceeds \$10,000. The Primary Term of the Lease may be amended and/or extended for a maximum of two additional one-year periods, upon the mutual written consent of both parties and upon approval by the Office of the State Comptroller, if the Lease amount exceeds \$10,000.

The Lease shall enter an additional term upon production of oil and/or natural gas from the Property, hereinafter referred to as the Secondary Term. The Secondary Term of the Lease shall continue thereafter for as long as oil and/or natural gas is or can be produced from the Property in commercially paying quantities.

ARTICLE 4: This Lease consists of the following documents in the following order of precedence:

1. Appendix A
2. Appendix B
3. The Lease (including schedules, attachments, and performance bond, if applicable)
4. The Bid
5. The Invitation for Bid

ARTICLE 5:

A. The Lessee covenants and agrees that:

During the Primary Term of the Lease:

1. Lessee shall pay to the Department an Annual Delay Rental in accordance with the provisions detailed in Article 5B of the Lease. The bonus payment is the first year's Annual Delay Rental payment.

During the Secondary Term of the Lease:

1. Lessee shall pay to the Department, as royalty, a sum equal to the value, at the field price per barrel, of one-eighth (1/8) part of all oil, distillate, condensate,

Attachment 1 - Draft Lease Contract

natural gasoline or other liquid hydrocarbons, hereinafter referred to as "Oil", measured at the wellhead, produced from the Property and delivered into the pipeline or storage tanks to which the well is connected, without deduction for exploration, production, operation or other costs of Lessee, the field price being that which prevails in that area on the day the Oil is delivered into the pipeline or storage tanks. Payments or royalty for oil marketed during any calendar month are to be made on or about the 30th day of the following month.

2. Lessee shall pay to the Department, as royalty, a sum equal to one-eighth (1/8) of the Lease price of all natural gas, casinghead gas or other gaseous substance, hereinafter referred to as "Gas", produced from the Property, measured at the wellhead on the date delivered to the purchaser of the Gas or sold or used off the Property or used in the manufacturing of gasoline or other products therefrom, without deduction for exploration, production, operation or other costs of Lessee. Payments or royalty for gas marketed during any calendar month are to be made on or about the 30th day of the following month.

3. Where the royalties payable under subparagraphs (a) and (b) above do not in any year equal or exceed the sum of five dollars (\$5.00) per acre of the Property per year, Lessee shall pay to the Department with respect to such year an amount equal to such sum.

These payments shall be remitted not less frequently than once per year nor more frequently than once per month and shall be accompanied by a sworn statement of the Lessee, its manager or other authorized agent in such form as may be prescribed by the Department which shall provide an itemized accounting of Oil and/or Gas produced from each well, the gross amounts of Oil and/or Gas produced since the last report, the market value of Oil on the applicable delivery dates and the Lease price of Gas during the applicable Lease periods. The schedule for these payments shall be established at the applicable time and shall be subject to annual revision. Copies of current and applicable gas sales contracts shall be provided to Department for its files as they are entered into.

For each producing well completed on the Property, Lessee shall install and properly maintain, at its expense, adequate and correct meters for the purpose of measuring, recording and reporting all hydrocarbons produced from the Property. For the producing life of this Lease and five years thereafter, Lessee shall keep and maintain records of all production meters associated with this Lease, including, but not limited to, inspections, calibrations, adjustments, repairs, replacements, integration records and integration reports. Originals, true copies or duplicates shall be kept or made available for examination within this state by the Department or its agents at all reasonable times.

- B. If operations for drilling are not commenced on the Property on or before one year after the effective date of this lease, this Lease shall then terminate as to both parties, unless on or before that date Lessee shall pay to the Department the sum of five dollars (\$5.00) per acre of the Property for the second year and for each remaining year of the Primary Term,

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hereinafter referred to as the "Annual Delay Rental", which shall permit the operator to defer commencement of drilling operations for successive periods of twelve (12) months each during the life of the Primary Term. The payment of Annual Delay Rental shall be mailed or delivered to Department on or before one year after the effective date of this lease or any anniversary thereof, hereinafter referred to as the "Annual Delay Rental payment date." Drilling operations herein shall be deemed to be commenced when a new well is "spudded in" or an existing well is re-entered for workover, deepening or plugging back in a continuous effort to reestablish production or obtain new production of oil or gas. Lessee may, at any time, upon 30 days written notice to the Department and subject to the Department's approval, execute and deliver to the Department a release or releases covering any portion or portions of the Property and thereby surrender this Lease as to such portion or portions and be relieved of all obligations as to the acreage surrendered, and thereafter, if such surrender be within the Primary Term, the Annual Delay Rentals payable hereunder shall be reduced in the proportion that the acreage covered hereby is reduced by said release or releases.

- C. If, after operations have commenced but prior to discovery of Oil or Gas on the Property, Lessee drills a dry hole thereon or if, after discovery of Oil or Gas, the production thereof ceases for any reason, other than from one or more of the causes set forth in Appendix B XVI, this Lease shall terminate as to both parties unless Lessee commences additional drilling or reworking operations within ninety (90) days after completion of such dry hole or cessation of production or commences or resumes the payment of Annual Delay Rental on the next succeeding Annual Delay Rental payment date.
- D. If, at the expiration of the Primary Term, Oil or Gas is not being produced on the Property, this Lease shall terminate, but if Lessee is then engaged in maintenance drilling or redrilling operations thereon, this Lease shall remain in effect so long as any drilling or redrilling operations are prosecuted on the Property, with no interval of more than ninety (90) consecutive days during which no drilling or redrilling operations are conducted on the Property and, if such operations result in the continued production of Oil or Gas, so long thereafter as Oil or Gas in commercially paying quantities is produced from the Property.
- E. All tools, derricks, boilers, boiler houses, buildings, pipelines, pumping and drilling equipment, tanks, engines and machinery, and the casing of all dry or exhausted wells, shall remain the property of the Lessee, and shall be removed at any time prior to or within ninety (90) days after termination of the Lease. Lessee shall not permit any nuisance to be maintained on the Property. Lessee shall not use the Property for any purpose other than those authorized in the Lease, and before abandoning any well, Lessee shall securely plug the same in accordance with the rules and regulations of the Department.
- F. The Lessee agrees not to assign, transfer or convey, sublet or otherwise dispose of this Lease or any of its contents or of its rights, title or interest therein or of its power to execute the Lease to any other person, company or corporation without the previous

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consent in writing of the Department. With the written consent of the Department, the rights of Lessee hereunder may be assigned in whole or in part and the provisions hereof shall extend to the heirs, successors and assigns of Lessee, but no change or divisions in ownership of the Property, rentals or royalties, however accomplished, shall operate to enlarge the obligations or diminish the rights of Lessee. Should Lessee assign this Lease in whole or in part with the approval of the Department, the Department may, as to the part assigned, look solely to the assignee for the performance of all duties and obligations hereunder, whether express or implied.

ARTICLE 6: Wherever it is provided in this Lease that notice shall be given or other communications sent to the Department or the Lessee, such notices or communications shall be delivered or sent by first class mail to:

DEPARTMENT:
Charles Gilchrist
Chief, Enforcement Section
Department of Environmental Conservation
Division of Mineral Resources
625 Broadway, 3rd Floor
Albany, NY 12233-6500

LESSEE:
Name & Address

ARTICLE 7:

A. After the occurrence of either of the following events on the Property:

- the siting, drilling, completion or abandonment of three wells on the Property by the Lessee, its successors, heirs or assigns; or
- the discovery on the Property of producible Oil or Gas, and

prior to the siting of any additional well locations on the Property, Lessee shall develop a well siting plan to be approved by the Department in writing. In discharging this obligation, Lessee shall plan and conduct its operations in such a manner as will minimize surface disturbance of the Property; prevent waste; and fully protect the correlative rights of all owners and the rights of all persons, including landowners and the general public. Well spacing shall be consistent with the statutory requirements of Article 23 of the Environmental Conservation Law and its attendant regulations or any lawful spacing order issued thereunder by the Department.

B. Lessee, at its option, and upon complete disclosure to and approval thereof by the

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Department of the joint agreement and plan, is hereby granted the right to unitize the acreage or any portion thereof covered by this Lease as to Oil and Gas, or either of them, contiguously with other land, lease or leases in the immediate vicinity thereof to the extent hereinafter provided, when in Lessee's judgment it is necessary or advisable to do so in order to properly prospect, develop and operate the Property in compliance with the spacing rules of the Department or when to do so would, in the judgment of Lessee, promote the conservation of Oil and Gas or either of them. Lessee under the provisions hereof may unitize acreage or any portion thereof covered by this Lease as above provided as to Oil in any one or more strata and as to Gas in any one or more strata. Units formed as to different strata need not conform in size or boundaries. The creation of units in one or more instances shall not exhaust the rights of the Lessee hereunder to unitize this Lease or portions thereof into other units. Lessee shall execute and deliver to the Department and file or record an instrument describing and designating the unit. Operations for drilling on or production of Oil or Gas from any part of a unit embracing all or part of the Property, regardless of whether such operations for drilling were commenced or such production was secured before or after the execution of the instrument designating the unit, shall be considered as operations from drilling on or production of Oil or Gas from the Property irrespective of whether the well or wells be located on the Property, and the entire acreage constituting such unit or units, as to Oil and/or Gas as herein provided, shall be treated for all purposes, except the payment of rentals and the payment of royalties on production from the unit, as if the same were included in this Lease. For the purpose of computing all royalties payable hereunder on Oil and/or Gas produced and saved from the unit, there shall be allocated to the Property and included in said unit a fractional portion of the Oil and/or Gas produced and saved from the unit after deducting that used for operations on the unit, such fraction to have as its numerator the number of surface acres constituting the Property and included in said unit and as its denominator the number of surface acres included in the unit. Royalties hereunder shall be computed on the portion of such production, whether it be Oil and/or Gas, so allocated to the Property and included in the unit, just as though such production were from the Property. The creation of a unit or units shall not have the effect of changing the ownership of the Property or the amount of rental which may become payable under this Lease. A unit may be dissolved by Lessee at any time when there is not a unit well thereon producing or capable of producing Oil and/or Gas in paying quantities.

ARTICLE 8: The Lessee shall carry on the development and operations in a professional manner, commit no waste on the Property and suffer none to be committed thereon, exercise proper care of the Property, and promptly surrender and return the Property upon termination of this Lease to the Department in a condition that in so far as possible is the same as at the commencement of this Lease, excepting natural changes.

ARTICLE 9: The Lessee shall keep an accurate account of all drilling operations. Accurate and reliable information concerning all wells and their production, operation, and management shall be furnished to the Department upon demand. The said Lessee shall also keep an accurate account showing the sales, prices, dates, purchases and whole amount of Oil and/or Gas

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produced. The Department and the Comptroller of the State of New York or any of their duly authorized representatives shall have access to any of the Lessee's books, documents, papers and records directly pertinent to the subject matter of this Lease for the purpose of making audits, examination, excerpts or transcripts.

ARTICLE 10: This Lease is not, in and of itself, an authorization to drill. Issuance of drilling permits for specific locations are subject to separate application to and approval by the Department pursuant to the policies and provisions of the Environmental Conservation Law (ECL) of the State of New York.

- A. In all activities of exploration, prospecting, extraction, piping, removal and other occupation and use of the Property, the Lessee shall be subject to the direction and control of the Department in so far as may be necessary to achieve compliance with the policies and provisions of the ECL, as from time to time may be in effect, and rules and regulations issued thereunder. All work associated with prospecting for oil and gas, the drilling of wells and the laying of pipes shall be approved by the Department in writing in order to minimize damage to the natural resources contained in the Property. Prior to the drilling of any well by Lessee, the Department or its representative shall, upon application of the Lessee, designate the location of such well, the area to be occupied surrounding the well location and the rights-of-way necessary for ingress and egress to such well and for pipes necessary to be used for the purpose of conveying Oil and/or Gas from such location and for conducting water necessary in the operation of such well. Access to the property may be limited or restricted by the Department during periods of wet weather and muddy conditions. The Department shall similarly designate such rights-of-way as may be necessary to convey Oil and/or Gas across the Property from land adjacent thereto owned by or leased by the Lessee and unitized with the Property pursuant to Article 7(b) above. Such rights-of-way, to be used by the Lessee during the life of the Lease only, and no longer, shall be maintained, to the satisfaction of the Department, in good operable condition pursuant to the Department's Minimum Road Construction Standards and Minimum Maintenance Standards for the Development of Oil and Gas Resources on State Forest Lands (May 2000), attached hereto as Appendix C.
- B. Notwithstanding forfeiture, termination or expiration of this lease, the Lessee shall be responsible for restoration of damaged areas in a manner approved by the Department. The Lessee shall also be liable to the Department for all damage or loss to the Department in the remainder of the Property including, but not limited to, the improvements thereupon and the appurtenances and hereditament thereunto belonging, by reason of the Oil and/or Gas drilling operations hereunder, including all damages that may be caused the Department by fires on the Property, if started by the Lessee or its agents or employees whether the same be done willfully or carelessly or accidentally. The Lessee further agrees to pay for all such damage within ten (10) days after the amount thereof is determined by the Department. The Lessee covenants and agrees to take such precautions against setting fire to the Property as the Department may require, and shall prevent the contamination of water in any manner whatsoever. The Department

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shall be the sole judge as to whether any such contamination is occurring or adequate precautions are being taken.

- C. In furtherance of the obligations of the Lessee under this Lease, but not by way of limitation of such obligations, the Lessee hereby agrees to observe the following conditions incident to any planned exploration, drilling or extraction activities on the Property:
1. The Lessee shall notify the Department at least thirty (30) days prior to entry upon the Property and shall obtain written permission before such entry unless the Lessee can demonstrate that such thirty-day period creates an undue hardship, but under no conditions shall the Lessee enter the Property without prior approval of the Department.
 2. Lessee shall, prior to making any disturbance to the Property, apply for and obtain from the Department a Temporary Revocable Permit (TRP) which may prescribe certain specific conditions required to protect the Property, including fish, wildlife, plant, land, air, water and recreational resources, and which may limit access to or disturbance of certain areas of the Property which, in the judgement of the Department, should not be disturbed. Authority for the issuance of a TRP is provided for in Articles 9 and 11 of the ECL for forest preserves, reforestation areas, and wildlife management areas. In furtherance of this objective, Lessee shall maintain a copy of this Lease on each drill site at all times for reference and use by its employees, and shall further provide a copy of this contract to each of its subcontractors and advise them of their obligations under its terms. The application for the TRP shall be accompanied by such plans, maps or other information as the Department may require.
 3. When it is deemed necessary in the judgment of the Department, prior to any ground disturbing activities and approval for drilling, Lessee will conduct a Stage 1 archaeological survey on the proposed disturbed area(s). After the survey is completed, conditions of approval will be formulated, if necessary, to mitigate any adverse impacts upon archaeological resources.
 4. Prior to the approval of drilling an examination will be performed by the Lessee to determine if any State or Federal listed threatened or endangered species are present. After the survey is completed, conditions of approval will be formulated, if necessary, to mitigate any adverse impacts upon threatened or endangered species.
 5. All access roads to drilling sites and all pipelines shall be constructed and subsequently maintained on routes selected and designated by the Department and in a manner approved by the Department.
 6. No trees shall be cut on the Property without the express prior approval of the Department. All trees, brush and vegetation cut during the clearing operations shall be cut as close to the ground as practicable, but not higher than three (3) inches above the ground. All marketable forest products over four (4) inches in diameter resulting from the clearing operations shall be cut to specified lengths of not less than eight (8) feet and shall be transported to and piled at points designated by the Department. All unmarketable woody material resulting from the clearing operation shall be

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toplogged, chipped or buried or removed from the Property, as the Department may direct. The Lessee shall reimburse the Department for the fair market value based on appraisals prepared by the Department for all marketable forest products removed in the clearing operations but not delivered to the Department and for any other damage to the Property by the actions of the Lessee.

7. Lessee shall not damage existing boundary line or property corner markers; in the event that any such damage does occur, the Lessee shall bear the full cost of resurvey and marking.
8. No occupancy or other surface disturbance will be allowed within 250 feet of any waterbody (streams, lakes, etc.). This distance may be modified when specifically approved in writing by an authorized officer of the Department.
9. No occupancy or other surface disturbance is allowed in any wetlands without written approval from the authorized officer of the Department.
10. No occupancy or surface disturbance on slopes exceeding 15 percent is allowed without specific approval of the authorized officer of the Department.
11. Erosion control devices shall be constructed where necessary in the judgment of Department to prevent soil erosion, and shall be constructed and/or installed to the satisfaction of the Department.
12. The Department may inspect any works, structures, operations, equipment, materials or other possessions or activities of Lessee at any time.
13. At all times, Lessee shall maintain the property in a neat and orderly condition and shall not permit surplus equipment, material or debris to be stored or to accumulate on the property.
14. For areas in which unproductive test wells have been drilled or in which producing wells have been taken out of production, all access roads thereto shall be returned as nearly as possible to their original condition. At the conclusion of drilling and/or production operations, all nonessential equipment, material and debris shall be removed from the site and the site shall be restored according to a plan approved in advance by the Department.
15. The Department may require, or, upon application of Lessee, may approve the installation of Department approved gates on access roads of Lessee when and where they are deemed necessary.
16. Any and all storage tanks installed on the property shall be diked to 150 percent of their capacity. Lessee shall be responsible for prompt removal of any and all fluid accumulations.
17. Approvals under this paragraph shall be secured from the Department's Regional Supervisor of Natural Resources or his/her designated agent in the Region in which the Property is located.

ARTICLE 11: This Lease shall be subject to the Constitution and laws of the State of New York and the applicable rules and regulations of the Department now or hereafter in force all of which are made a part and condition of this Lease; provided however, that no rules or regulations made after the execution of this Lease affecting either the length of the term hereof or the rate or royalty, or payment hereunder, shall operate to affect the terms and conditions of this Lease pertaining to the term hereof or royalties or other payments hereunder.

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ARTICLE 12: In the event that Lessee fails to comply with any provision of this Lease, notwithstanding the provisions of Appendix B, paragraph I thereof, the Department may terminate this Lease at any time upon fifteen (15) days written notice. In the event of termination, Lessee shall cease work upon the expiration of such fifteen (15) day period, or such other period as the Department shall specify. The Lessee may at any time hereafter surrender and wholly terminate this Lease upon payment of any sums due hereunder, and may exercise such right by executing and delivering to Department a release covering the above-described premises.

IF THIS LEASE BECOMES FORFEITED, TERMINATED OR EXPIRES, THE LESSEE, OR IF THE LEASE HAS BEEN ASSIGNED, THE ASSIGNEE, IS REQUIRED TO PROVIDE A DOCUMENT CANCELING THE LEASE AS OF RECORD, AT NO COST TO THE CURRENT LANDOWNER. IF THE LESSEE OR ASSIGNEE FAILS TO CANCEL THE LEASE, THE CURRENT LANDOWNER MAY COMPEL A CANCELLATION PURSUANT TO SECTION 15-304 OF THE GENERAL OBLIGATIONS LAW.

ARTICLE 13: The Department shall continue to have the full right to administer, control, manage, protect, maintain, develop and utilize the Property, and the natural resources thereof other than Oil and Gas, as though this Lease had not been made; but in so doing will, in so far as practicable, avoid doing any damage to any of the structures or equipment of the Lessee.

ARTICLE 14: It is hereby fully and mutually understood and agreed that no rights are granted in this Lease which shall be in any way so construed as to impair the powers or duties of the Department or its representatives in the execution of the Environmental Conservation Law of the State of New York.

ARTICLE 15: SPECIAL CONDITIONS (If none adopted, enter NONE).
NONE

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Department Contact:

Charles Gilchrist
NYS Department of Environmental Conservation
Division of Mineral Resources
625 Broadway, 3rd Floor
Albany, New York 12233-6500

Lessee:

Name: _____

Title: _____

Address: _____

Federal Identification No. _____

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SIGNATURE PAGE

Contract X00xxxx

Agency Certification:

"In addition to the acceptance of this Lease, I also certify that original copies of this signature page will be attached to all other exact copies of this Lease."

LESSEE SIGNATURE:

AGENCY SIGNATURE:

NYSDEC: _____

TITLE: _____

TITLE: _____

DATED: _____

DATED: _____

ATTORNEY GENERAL'S
SIGNATURE:

COMPTROLLER'S SIGNATURE:

DATED: _____

DATED: _____

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ACKNOWLEDGMENT FORM

(PERSONAL ACKNOWLEDGMENT)

State of New York)
) s.s.:
County of)

On the _____ day of _____, in the year two thousand _____, before me personally came _____ to me personally known, and known to me to be the individual described in, and who executed the foregoing instrument, and (s)he duly acknowledged to me that (s)he executed the same.

Notary Public

(CO-PARTNERSHIP ACKNOWLEDGMENT)

State of New York)
) s.s.:
County of)

On the _____ day of _____, in the year two thousand _____, before me personally came _____ to me known, and known to be a member of _____, the firm described in and which executed the foregoing instrument, and (s)he acknowledged to me that (s)he subscribed the name of said firm thereto on behalf of said firm for the purpose therein mentioned.

Notary Public

(CORPORATE ACKNOWLEDGMENT WITH SEAL)

State of New York)
) s.s.:
County of)

On the _____ day of _____, in the year two thousand _____, before me personally came _____ to me known, who duly being sworn, did depose and say that (s)he resides in _____; that (s)he is _____ of _____ the corporation described in and which executed the above instrument; that (s)he knows the seal of said corporation, that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that (s)he signed his (her) name thereto by like order.

Notary Public

(CORPORATE ACKNOWLEDGMENT WITHOUT SEAL)

State of New York)
) s.s.:
County of)

On the _____ day of _____, in the year two thousand _____, before me personally came _____ to me known, who duly being sworn, did depose and say that (s)he resides in _____; that (s)he is an officer of _____; namely, _____ the _____ of _____; that (s)he is authorized by the governing body of said corporation to sign contracts; and that (s)he did sign the foregoing instrument on behalf of, and with authority to bind said corporation.

Notary Public

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STATE OF NEW YORK)
) ss.:
COUNTY OF ALBANY)

On this _____ day of _____, 20____, before me, the subscriber personally
appeared _____ to me known to be a
_____ of the Department of Environmental Conservation of the State of
New York and he duly acknowledged that he executed the same as such for and in behalf of The
People of the State of New York.

NOTARY PUBLIC

STANDARD CLAUSES FOR NYS CONTRACTS

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the State, whether a contractor, licensor, licensee, lessor, lessee or any other party):

1. EXECUTORY CLAUSE. In accordance with Section 41 of the State Finance Law, the State shall have no liability under this contract to the Contractor or to anyone else beyond funds appropriated and available for this contract.

2. NON-ASSIGNMENT CLAUSE. In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the previous consent, in writing, of the State and any attempts to assign the contract without the State's written consent are null and void. The Contractor may, however, assign its right to receive payment without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.

3. COMPTROLLER'S APPROVAL. In accordance with Section 112 of the State Finance Law (or, if this contract is with the State University or City University of New York, Section 355 or Section 6218 of the Education Law), if this contract exceeds \$15,000 (or the minimum thresholds agreed to by the Office of the State Comptroller for certain S.U.N.Y. and C.U.N.Y. contracts), or if this is an amendment for any amount to a contract which, as so amended, exceeds said statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds \$10,000, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services is required when such contracts exceed \$30,000 (State Finance Law Section 163.6.a).

4. WORKERS' COMPENSATION BENEFITS. In accordance with Section 142 of the State Finance Law, this contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.

5. NON-DISCRIMINATION REQUIREMENTS. To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, sexual orientation, age, disability, genetic predisposition or carrier status, or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex, or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the

performance of work under this contract. Contractor is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

6. WAGE AND HOURS PROVISIONS. If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law.

7. NON-COLLUSIVE BIDDING CERTIFICATION. In accordance with Section 139-d of the State Finance Law, if this contract was awarded based upon the submission of bids, Contractor warrants, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further warrants that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the State a non-collusive bidding certification on Contractor's behalf.

8. INTERNATIONAL BOYCOTT PROHIBITION. In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds \$5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2NYCRR 105.4).

9. SET-OFF RIGHTS. The State shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the State's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract with any State department or agency, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.

10. RECORDS. The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively, "the Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter. The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this contract, shall have access to the Records during normal business hours at an office of the Contractor

within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.

11. IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION. (a) **FEDERAL EMPLOYER IDENTIFICATION NUMBER and/or FEDERAL SOCIAL SECURITY NUMBER.** All invoices or New York State standard vouchers submitted for payment for the sale of goods or services or the lease of real or personal property to a New York State agency must include the payee's identification number, i.e., the seller's or lessor's identification number. The number is either the payee's Federal employer identification number or Federal social security number, or both such numbers when the payee has both such numbers. Failure to include this number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on its invoice or New York State standard voucher, must give the reason or reasons why the payee does not have such number or numbers.

(b) **PRIVACY NOTIFICATION.** (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law.

(2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or lease. The information is maintained in New York State's Central Accounting System by the Director of Accounting Operations, Office of the State Comptroller, AESOB, Albany, New York 12236.

12. EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITIES AND WOMEN. In accordance with Section 312 of the Executive Law, if this contract is: (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000.00, whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written agreement in excess of \$100,000.00 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written agreement in excess of \$100,000.00 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project, then:

(a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination. Affirmative action shall mean recruitment,

employment, job assignment, promotion, upgradings, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation;

(b) at the request of the contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the contractor's obligations herein; and

(c) the Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Contractor will include the provisions of "a", "b", and "c" above, in every subcontract over \$25,000.00 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State; or (iii) banking services, insurance policies or the sale of securities. The State shall consider compliance by a contractor or subcontractor with the requirements of any federal law concerning equal employment opportunity which effectuates the purpose of this section. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the Governor's Office of Minority and Women's Business Development pertaining hereto.

13. ~~CONFLICTING TERMS.~~ In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Appendix A, the terms of this Appendix A shall control.

14. GOVERNING LAW. This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

15. LATE PAYMENT. Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article 11-A of the State Finance Law to the extent required by law.

16. NO ARBITRATION. Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.

17. SERVICE OF PROCESS. In addition to the methods of service allowed by the State Civil Practice Law & Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

18. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS. The Contractor certifies and warrants that all wood products to be used under this contract award will be in accordance with, but not limited to, the specifications and provisions of State Finance Law §165. (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the responsibility of the contractor to establish to meet with the approval of the State.

In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in §165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the State.

19. MACBRIDE FAIR EMPLOYMENT PRINCIPLES. In accordance with the MacBride Fair Employment Principles (Chapter 807 of the Laws of 1992), the Contractor hereby stipulates that the Contractor either (a) has no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles (as described in Section 165 of the New York State Finance Law), and shall permit independent monitoring of compliance with such principles.

20. OMNIBUS PROCUREMENT ACT OF 1992. It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

NYS Department of Economic Development
Division for Small Business
30 South Pearl St - 7th Floor
Albany, New York 12245
Telephone: 518-292-5220

A directory of certified minority and women-owned business enterprises is available from:

NYS Department of Economic Development
Division of Minority and Women's Business Development
30 South Pearl St - 2nd Floor
Albany, New York 12245
<http://www.empire.state.ny.us>

The Omnibus Procurement Act of 1992 requires that by signing this bid proposal or contract, as applicable, Contractors certify that whenever the total bid amount is greater than \$1 million:

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

(b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Contractor agrees to document these efforts and to provide said documentation to the State upon request; and

(d) The Contractor acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

21. RECIPROCITY AND SANCTIONS PROVISIONS. Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 15, 2002, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii. Contact NYS Department of Economic Development for a current list of jurisdictions subject to this provision.

22. PURCHASES OF APPAREL. In accordance with State Finance Law 162 (4-a), the State shall not purchase any apparel from any vendor unable or unwilling to certify that: (i) such apparel was manufactured in compliance with all applicable labor and occupational safety laws, including, but not limited to, child labor laws, wage and hours laws and workplace safety laws, and (ii) vendor will supply, with its bid (or, if not a bid situation, prior to or at the time of signing a contract with the State), if known, the names and addresses of each subcontractor and a list of all manufacturing plants to be utilized by the bidder.

APPENDIX B

Standard Clauses for All New York State Department of Environmental Conservation Contracts

The parties to the attached contract, license, lease, grant, amendment or other agreement of any kind (hereinafter "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract. The word "Contractor" herein refers to any party to the contract, other than the New York State Department of Environmental Conservation (hereinafter "Department").

I. **Postponement, suspension, abandonment or termination by the Department:** The Department shall have the right to postpone, suspend, abandon or terminate this contract, and such actions shall in no event be deemed a breach of contract. In the event of any termination, postponement, delay, suspension or abandonment, the Contractor shall immediately stop work, take steps to incur no additional obligations, and to limit further expenditures. Within 15 days of receipt of notice, the Contractor shall deliver to the Department all data, reports, plans, or other documentation related to the performance of this contract, including but not limited to source codes and specifications, guarantees, warranties, as-built plans and shop drawings. In any of these events, the Department shall make settlement with the Contractor upon an equitable basis as determined by the Department which shall fix the value of the work which was performed by the Contractor prior to the postponement, suspension, abandonment or termination of this contract. This clause shall not apply to this contract if the contract contains other provisions applicable to postponement, suspension or termination of the contract.

II. **Indemnification and Holdharmless** The Contractor agrees that it will indemnify and save harmless the Department and the State of New York from and against all losses from claims, demands, payments, suits, actions, recoveries and judgments of every nature and description brought or recovered against it by reason of any omission or tortious act of the Contractor, its agents, employees, suppliers or subcontractors in the performance of this contract. The Department and the State of New York may retain such monies from the amount due Contractor as may be necessary to satisfy any claim for damages, costs and the like, which is asserted against the Department and/or the State of New York.

III. **Conflict of Interest (a) Organizational Conflict of Interest.** To the best of the Contractor's knowledge and belief, the Contractor warrants that there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as herein defined, or

that the Contractor has disclosed all such relevant information to the Department.

(1) An organizational conflict of interest exists when the nature of the work to be performed under this contract may, without some restriction on future activities, impair or appear to impair the Contractor's objectivity in performing the work for the Department.

(2) The Contractor agrees that if an actual, or potential organizational conflict of interest is discovered at any time after award, whether before or during performance, the Contractor will immediately make a full disclosure in writing to the Department. This disclosure shall include a description of actions which the Contractor has taken or proposes to take, after consultation with the Department, to avoid, mitigate, or minimize the actual or potential conflict.

(3) To the extent that the work under this contract requires access to personal, proprietary or confidential business or financial data of persons or other companies, and as long as such data remains proprietary or confidential, the Contractor shall protect such data from unauthorized use and disclosure and agrees not to use it to compete with such companies.

(b) **Personal Conflict of Interest:** The following provisions with regard to management or professional level employee personnel performing under this contract shall apply until the earlier of the termination date of the affected employee(s) or the duration of the contract.

(1) A personal conflict of interest is defined as a relationship of an employee, subcontractor employee, or consultant with an entity that may impair or appear to impair the objectivity of the employee, subcontractor employee, or consultant in performing the contract work. The Contractor agrees to notify the Department immediately of any actual, or potential personal conflict of interest with regard to any such person working on or having access to information regarding this contract, as soon as Contractor becomes aware of such conflict. The Department will notify the Contractor of the appropriate action to be taken.

(2) The Contractor agrees to advise all management or professional level employees involved in the work of this contract, that they must report any personal conflicts of interest to the Contractor. The Contractor must then advise the Department which will advise the Contractor

of the appropriate action to be taken.

(3) Unless waived by the Department, the Contractor shall certify annually that, to the best of the Contractor's knowledge and belief, all actual, apparent or potential conflicts of interest, both personal and organizational, as defined herein, have been reported to the Department. Such certification must be signed by a senior executive of the Contractor and submitted in accordance with instructions provided by the Department. Along with the annual certification, the Contractor shall also submit an update of any changes in any conflict of interest plan submitted with its proposal for this contract. The initial certification shall cover the one-year period from the date of contract award, and all subsequent certifications shall cover successive annual periods thereafter. The certification is to be submitted no later than 45 days after the close of the previous certification period covered.

(4) In performing this contract, the Contractor recognizes that its employees may have access to data, either provided by the Department or first generated during contract performance, of a sensitive nature which should not be released without Department approval. If this situation occurs, the Contractor agrees to obtain confidentiality agreements from all affected employees working on requirements under this contract including subcontractors and consultants. Such agreements shall contain provisions which stipulate that each employee agrees not to disclose, either in whole or in part, to any entity external to the Department, Department of Health or the New York State Department of Law, any information or data provided by the Department or first generated by the Contractor under this contract, any site-specific cost information, or any enforcement strategy without first obtaining the written permission of the Department. If a Contractor, through an employee or otherwise, is subpoenaed to testify or produce documents, which could result in such disclosure, the Contractor must provide immediate advance notification to the Department so that the Department can authorize such disclosure or have the opportunity to take action to prevent such disclosure. Such agreements shall be effective for the life of the contract and for a period of five (5) years after completion of the contract.

(c) Remedies - The Department may terminate this contract in whole or in part, if it deems such termination necessary to avoid an organizational or personal conflict of interest, or an unauthorized disclosure of information. If the Contractor fails to make required disclosures or misrepresents relevant information to the Department, the Department may terminate the contract, or pursue such other remedies as may be permitted by the terms of Clause I of this Appendix or other applicable provisions

of this contract regarding termination.

(d) The Contractor will be ineligible to make a proposal or bid on a contract for which the Contractor has developed the statement of work or the solicitation package

(e) The Contractor agrees to insert in each subcontract or consultant agreement placed hereunder (except for subcontracts or consultant agreements for well drilling, fence erecting, plumbing, utility hookups, security guard services, or electrical services) provisions which shall conform substantially to the language of this clause, including this paragraph (e), unless otherwise authorized by the Department.

If this is a contract for work related to action at an inactive hazardous waste site, the following paragraph shall apply to those Contractors whose work requires the application of professional judgment: It does not apply to construction contracts.

(f) Due to the scope and nature of this contract, the Contractor shall observe the following restrictions on future hazardous waste site contracting for the duration of the contract.

(1) The Contractor, during the life of the work assignment and for a period of three (3) years after the completion of the work assignment, agrees not to enter into a contract with or to represent any party with respect to any work relating to remedial activities or work pertaining to a site where the Contractor previously performed work for the Department under this contract without the prior written approval of the Department.

(2) The Contractor agrees in advance that if any bids/proposals are submitted for any work for a third party that would require written approval of the Department prior to entering into a contract because of the restrictions of this clause, then the bids/proposals are submitted at the Contractor's own risk, and no claim shall be made against the Department to recover bid/proposal costs as a direct cost whether the request for authorization to enter into the contract is denied or approved.

IV. Requests for Payment All requests for payment by the Contractor must be submitted on forms supplied and approved by the Department. Each payment request must contain such items of information and supporting documentation as are required by the Department, and shall be all-inclusive for the period of time covered by the payment request.

V. Compliance with Federal requirements To the extent that federal funds are

provided to the Contractor or used in paying the Contractor under this contract, the Contractor agrees that it will comply with all applicable federal laws and regulations, including but not limited to those laws and regulations under which the Federal funds were authorized. The Contractor further agrees to insert in any subcontract hereunder, provisions which shall conform substantially to the language of this clause.

VI. Independent Contractor The Contractor shall have the status of an independent contractor. Accordingly, the Contractor agrees that it will conduct itself in a manner consistent with such status, and that it will neither hold itself out as, nor claim to be, an officer or employee of the Department by reason of this contract. It further agrees that it will not make any claim, demand or application to the Department for any right or privilege applicable to an officer or employee of the Department, including but not limited to worker's compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit.

VII. Article 15-A Requirements The terms contained in this clause shall have the definitions as given in, and shall be construed according to the intent of Article 15-A of the Executive Law, 5 NYCRR Part 140, et. seq., Article 52 of the Environmental Conservation Law and 6 NYCRR Part 615, et. seq., as applicable, and any goals established by this clause are subject to the intent of such laws and regulations.

(a) If the maximum contract price herein equals or exceeds \$25,000, and this contract is for labor, services, supplies, equipment, or materials; or

(b) If the maximum contract price herein equals or exceeds \$100,000 and this contract is for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; then

(c) The affirmative action provisions and equal employment opportunity provisions contained in this paragraph and paragraphs (d) and (e) of this clause shall be applicable within the limitations established by Executive Law §§312 and 313 and the applicable regulations.

(1) The Contractor is required to make good faith efforts to subcontract at least 0 % of the dollar value of this contract to Minority Owned Business Enterprises (MBEs) and at least 0 % of such value to Women Owned Business Enterprises (WBEs).

(2) The Contractor is required to make good faith efforts to employ or contractually require any Subcontractor with

whom it contracts to make good faith efforts to employ minority group members for at least 0 % of, and women for at least 0 % of, the workforce hours required to perform the work under this contract.

(3) The Contractor is required to make good faith efforts to solicit the meaningful participation by enterprises identified in the NYS Directory of Certified Businesses provided by:

Empire State Development Corp.
Div. Minority & Women's Business Development
30 South Pearl Street
Albany, New York 12245
Phone: (518) 292-5250
Fax: (518) 292-5803
and
Empire State Development Corp.
633 Third Avenue
New York, NY 10017
Phone: (212) 803-2414
Fax: (212) 803-3223
internet: www.empire.state.ny.us/esd.htm

(d) The Contractor agrees to include the provisions set forth in paragraphs (a), (b) and (c) above and paragraphs (a), (b), and (c) of clause 12 of Appendix A in every subcontract in such a manner that the provisions will be binding upon each Subcontractor as to work under such subcontract. For the purpose of this paragraph, a "subcontract" shall mean an agreement providing for a total expenditure in excess of \$25,000 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon in which a portion of the Contractor's obligation under a State contract is undertaken or assumed.

(e) The Contractor is required to make good faith efforts to utilize the MBE/WBEs identified in the utilization plan to the extent indicated in such plan, and otherwise to implement it according to its terms. The Contractor is requested to report on such implementation periodically as provided by the contract, or annually, whichever is more frequent.

VIII. Compliance with applicable laws

(a) Prior to the commencement of any work under this contract, the Contractor is required to meet all legal requirements necessary in the performance of the contract. This includes but is not limited to compliance with all applicable federal, state and local laws and regulations promulgated thereunder. It is the Contractor's responsibility to obtain any necessary permits, or other authorizations. By signing this

contract, the Contractor affirmatively represents that it has complied with said laws, unless it advises the Department otherwise, in writing. The Department signs this contract in reliance upon this representation.

(b) During the term of this contract, and any extensions thereof, the Contractor must remain in compliance with said laws. A failure to notify the Department of noncompliance of which the Contractor was or should have been aware, may be considered a material breach of this contract.

IX. Dispute Resolution The parties agree to the following steps, or as many as are necessary to resolve disputes between the Department and the Contractor.

(a) The Contractor specifically agrees to submit, in the first instance, any dispute relating to this contract to the designated individual, who shall render a written decision and furnish a copy thereof to the Contractor.

(1) The Contractor must request such decision in writing no more than fifteen days after it knew or should have known of the facts which are the basis of the dispute.

(2) The decision of the designated individual shall be the final agency determination, unless the Contractor files a written appeal of that decision with the designated appeal individual ("DAI") within twenty days of receipt of that decision.

(b) Upon receipt of the written appeal, the DAI, will review the record and decision. Following divisional procedures in effect at that time, the DAI will take one of the following actions, with written notice to the Contractor.

(1) Remand the matter to the program staff for further negotiation or information if it is determined that the matter is not ripe for review; or

(2) Determine that there is no need for further action, and that the determination of the designated individual is confirmed; or

(3) Make a determination on the record as it exists.

(c) The decision of the DAI shall be the final agency decision unless the Contractor files a written appeal of that decision with the Chair of the Contract Review Committee ("CRC") within twenty days of receipt of that decision.

The designated individual to hear disputes is:

Jack Dahl, Director, Bureau of Oil & Gas Regulation,
NYSDEC, Division of Mineral Resources
625 Broadway, 3rd Floor, Albany, NY 12233-6500

Phone: (518) 402-8056

The designated appeal individual to review decisions is:

John C. Harmon, Assistant Director
NYSDEC, Division of Mineral Resources
625 Broadway, 3rd Floor, Albany, NY 12233-6500

Phone: (518) 402-8075

The Chair of the Contract Review Committee is:

Department of Environmental Conservation
Nancy W. Lussier, Chair
Contract Review Committee
625 Broadway, 10th Floor
Albany, NY 12233-5010
Telephone: (518) 402-9228

(d) Upon receipt of the written appeal, the Chair of the CRC, in consultation with the members of the CRC and the Office of General Counsel, will take one of the following actions, or a combination thereof, with written notice to the Contractor.

(1) Remand the matter to program staff for additional fact finding, negotiation, or other appropriate action; or

(2) Adopt the decision of the DAI; or

(3) Consider the matter for review by the CRC in accordance with its procedures.

(e) Following a decision to proceed pursuant to (d) 3, above, the Chair of the CRC shall convene a proceeding in accordance with the CRC's established contract dispute resolution guidelines. The proceeding will provide the Contractor with an opportunity to be heard.

(f) Following a decision pursuant to (d) 2 or (d) 3, the CRC shall make a written recommendation to the Assistant Commissioner for Administration who shall render the final agency determination.

(g) At any time during the dispute resolution process, and upon mutual agreement of the parties, the Office of Hearings and Mediation Services (OHMS) may be requested to provide mediation services or other appropriate means to assist in resolving the dispute. Any findings or recommendations made by the OHMS

will not be binding on either party.

(h) Final agency determinations shall be subject to review only pursuant to Article 78 of the Civil Practice Law and Rules.

(i) Pending final determination of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract in accordance with the decision of the designated individual. Nothing in this Contract shall be construed as making final the decision of any administrative officer upon a question of law.

(j) (1) Notwithstanding the foregoing, at the option of the Contractor, the following shall be subject to review by the CRC: Disputes arising under Article 15-A of the Executive Law (Minority and Women Owned Business participation), the Department's determination with respect to the adequacy of the Contractor's Utilization Plan, or the Contractor's showing of good faith efforts to comply therewith. A request for a review before the CRC should be made, in writing, within twenty days of receipt of the Department's determination.

(2) The CRC will promptly convene a review in accordance with Article 15-A of the Executive Law and the regulations promulgated thereunder.

X. Labor Law Provisions

(a) When applicable, the Contractor shall post, in a location designated by the Department, a copy of the New York State Department of Labor schedules of prevailing wages and supplements for this project, a copy of all re-determinations of such schedules for the project, the Workers' Compensation Law Section 51 notice, all other notices required by law to be posted at the site, the Department of Labor notice that this project is a public work project on which each worker is entitled to receive the prevailing wages and supplements for their occupation, and all other notices which the Department directs the Contractor to post. The Contractor shall provide a surface for such notices which is satisfactory to the Department. The Contractor shall maintain such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. Contractor shall post such notices before commencing any work on the site and shall maintain such notices until all work on the site is complete.

(b) When appropriate, contractor shall distribute to each worker for this Contract a notice, in a form provided by the Department, that this project is a public work project on which each worker is entitled to receive the prevailing wage and supplements for the occupation

at which he or she is working. Worker includes employees of Contractor and all Subcontractors and all employees of suppliers entering the site. Such notice shall be distributed to each worker before they start performing any work of this contract. At the time of distribution, Contractor shall have each worker sign a statement, in a form provided by the Department, certifying that the worker has received the notice required by this section, which signed statement shall be maintained with the payroll records required by the following paragraph (c).

(c) Contractor shall maintain on the site the original certified payrolls or certified transcripts thereof which Contractor and all of its Subcontractors are required to maintain pursuant to the New York Labor Law Section 220. Contractor shall maintain with the payrolls or transcripts thereof, the statements signed by each worker pursuant to paragraph (b).

(d) Within thirty days of issuance of the first payroll, and every thirty days thereafter, the Contractor and every subcontractor must submit a transcript of the original payroll to the Department, which transcript must be subscribed and affirmed as true under penalty of perjury.

XI. Offset In accordance with State Law, the Department has the authority to administratively offset any monies due it from the Contractor, from payments due to the Contractor under this contract. The Department may also (a) assess interest or late payment charges, and collection fees, if applicable; (b) charge a fee for any dishonored check; (c) refuse to renew certain licenses and permits.

XII. Tax Exemption Pursuant to Tax Law Section 1116, the State is exempt from sales and use taxes. A standard state voucher is sufficient evidence thereof. For federal excise taxes, New York's registration Number 14740026K covers tax-free transactions under the Internal Revenue Code.

XIII. Litigation Support In the event that the Department becomes involved in litigation related to the subject matter of this contract, the Contractor agrees to provide background support and other litigation support, including but not limited to depositions, appearances, and testimony. Compensation will be negotiated and based on rates established in the contract, or as may otherwise be provided in the contract.

XIV. Equipment Any equipment purchased with funds provided under this contract, shall remain the property of the Department, unless otherwise

provided in the contract. The Contractor shall be liable for all costs for maintaining the property in good, usable condition. It shall be returned to the Department upon completion of the contract, in such condition, unless the Department elects to sell the equipment to the Contractor, upon mutually agreeable terms.

XV. Inventions or Discoveries Any invention or discovery first made in performance of this Contract shall be the property of the Department, unless otherwise provided in the contract. The Contractor agrees to provide the Department with any and all materials related to this property. At the Department's option, the Contractor may be granted a non-exclusive license.

XVI. Patent and Copyright Protection If any patented or copyrighted material is involved in or results from the performance of this Contract, this Article shall apply.

(a) The Contractor shall, at its expense, defend any suit instituted against the Department and indemnify the Department against any award of damages and costs made against the Department by a final judgment of a court of last resort based on the claim that any of the products, services or consumable supplies furnished by the Contractor under this Contract infringes any patent, copyright or other proprietary right; provided the Department gives the Contractor:

(1) prompt written notice of any action, claim or threat of infringement suit, or other suit, and

(2) the opportunity to take over, settle or defend such action at the Contractor's sole expense, and

(3) all available information, assistance and authority necessary to the action, at the Contractor's sole expense.

The Contractor shall control the defense of any such suit, including appeals, and all negotiations to effect settlement, but shall keep the Department fully informed concerning the progress of the litigation.

(b) If the use of any item(s) or parts thereof is held to infringe a patent or copyright and its use is enjoined, or Contractor believes it will be enjoined, the Contractor shall have the right, at its election and expense to take action in the following order of precedence:

(1) procure for the Department the right to continue using the same item or parts thereof;

(2) modify the same so that it becomes non-infringing and of at least the same quality and performance;

(3) replace the item(s) or parts thereof with noninfringing items of at least the same quality and performance;

(4) if none of the above remedies are available, discontinue its use and eliminate any future charges or royalties pertaining thereto. The Contractor will buy back the infringing product(s) at the State's book value, or in the event of a lease, the parties shall terminate the lease. If discontinuation or elimination results in the Contractor not being able to perform the Contract, the Contract shall be terminated.

(c) In the event that an action at law or in equity is commenced against the Department arising out of a claim that the Department's use of any item or material pursuant to or resulting from this Contract infringes any patent, copyright or proprietary right, and such action is forwarded by the Department to the Contractor for defense and indemnification pursuant to this Article, the Department shall copy all pleadings and documents forwarded to the Contractor together with the forwarding correspondence and a copy of this Contract to the Office of the Attorney General of the State of New York. If upon receipt of such request for defense, or at any time thereafter, the Contractor is of the opinion that the allegations in such action, in whole or in part, are not covered by the indemnification set forth in this Article, the Contractor shall immediately notify the Department and the Office of the Attorney General of the State of New York in writing and shall specify to what extent the Contractor believes it is and is not obligated to defend and indemnify under the terms and conditions of this Contract. The Contractor shall in such event protect the interests of the Department and State of New York and secure a continuance to permit the State of New York to appear and defend its interests in cooperation with Contractor as is appropriate, including any jurisdictional defenses which the Department and State shall have.

(d) The Contractor shall, however, have no liability to the Department under this Article if any infringement is based upon or arises out of: (1) compliance with designs, plans, or specifications furnished by or on behalf of the Department as to the items; (2) alterations of the items by the Department; (3) failure of the Department to use updated items provided by the Contractor for avoiding infringement; (4) use of items in combination with apparatus or devices not delivered by the Contractor; (5) use of items in a manner for which the same were neither designed nor contemplated; or (6) a patent or copyright in which the Department or any affiliate or subsidiary of the Department has any direct or indirect interest by license or otherwise.

(c) The foregoing states the Contractor's entire liability for, or resulting from, patent or copyright infringement or claim thereof.

XVII. Force Majeure The term Force Majeure shall include acts of God, work stoppages due to labor disputes or strikes, fires, explosions, epidemics, riots, war rebellion, sabotage or the like. If a failure of or delay in performance by either party results from the occurrence of a Force Majeure event, the delay shall be excused and the time for performance extended by a period equivalent to the time lost because of the Force majeure event, if and to the extent that:

(a) The delay or failure was beyond the control of the party affected and not due to its fault or negligence; and

(b) The delay or failure was not extended because of the affected party's failure to use all reasonable diligence to overcome the obstacle or to resume performance immediately after such obstacle was overcome; and

(c) The affected party provides notice within (5) days of the onset of the event, that it is invoking the protection of this provision.

XVIII. Freedom of Information Requests

The Contractor agrees to provide the Department with any records which must be released in order to comply with a request pursuant to the Freedom of Information Law. The Department will provide the contractor with an opportunity to identify material which may be protected from release and to support its position.

XIX. Precedence In the event of a conflict between the terms of this Appendix B and the terms of the Contract (including any and all attachments thereto and amendments thereof, but not including Appendix A), the terms of this Appendix B shall control. In the event of a conflict between the terms of this Appendix B, and the terms of Appendix A, the terms of Appendix A shall control.

APPENDIX C

DIVISION OF LANDS AND FORESTS
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

MINIMUM ROAD CONSTRUCTION STANDARDS
AND
MINIMUM MAINTENANCE STANDARDS

FOR THE DEVELOPMENT OF OIL AND GAS RESOURCES
ON STATE FOREST LANDS

Dated December 1988
Updated May 2000

1.0 Introduction

This paper addresses the technical standards to which oil and gas operations should conform.

These standards have been developed for the "prudent" operator, and have a favorable cost/benefit ratio. Furthermore, it is a belief these standards follow sound surface protection practices as well as good engineering practices.

2.0 Construction Standards

2.1 For development wells, it is the accepted practice to build roads to a permanent standard, to include culverts and surfacing, prior to the commencement of drilling operations. This method has proven to be the method most sensitive to the physical environment. Additionally, constructing roads to this standard is cost effective in that road and vehicle maintenance are reduced. Also, good planning requires that allowances be made for the effective ingress and egress of safety equipment (fire fighting, ambulance) without the use of bulldozing/towing.

2.2 Road layout and design is composed of many elements. Each element is discussed in the sections to follow. It should be noted that the combined elements produce a final road, acceptable to all concerned (lessor and lessee).

3.0 Specification

3.1 The first step in developing a road system is planning the most efficient ingress and egress and properly locating the system on the ground.

3.2 Grade is a critical aspect for any road location. To properly determine road grade a simple Abney hand level which will measure percent of slope can be used. Long steady grades often permit the buildup of drainage water and that increases the erosion potential unless adequate drainage structures are installed. Conversely, a length of road with no grade is very difficult, if not impossible, to drain and will usually present a serious mud problem on the haulway.

Road grades ideally should be kept to a minimum somewhere between 2% and 10%. Where absolutely necessary grades of 15% to 20% may be used for short distances not to exceed 300 to 500 feet. Where a steep grade is necessary, at least 300 feet of road above and below should be less than 10% grade.

3.3 Roads should be located on stable, soils to provide safe ingress and egress. Roads should be constructed on side hill locations whenever possible. The side hill construction permits good cross drainage. When laying out a road system, avoid when possible, problem spots such as seeps, springs or swampy areas. If wet areas are unavoidable, proper drainage measures must be installed.

3.4 Roads shall not be located in perennial or intermittent stream channels. Roads should be above a stream course and allowance made for a adequate filter strip of undisturbed vegetation between the road and the stream. The width of the filter strip necessary will depend an the slope between the road and the stream. The following table will serve as guide for filter strip width:

<u>Slope of Land</u> <u>Between Road and Stream</u>	<u>Minimum Width of</u> <u>Filter Strip</u>
Percent	Feet
0	25
10	45
20	65
30	85
40	105
50	125
60	145
70	165

3.5 All crossings of perennial streams should be made using approved bridges, culverts or similar structures.

3.6 Road locations should be located where they will not cause additional downstream flooding and/or sediment deposition.

3.7 Road location should be flagged at close intervals, such that the proposed route can be easily discerned. A flagging interval of 75 feet or less is desirable, with particular attention paid to curves and stream crossings. The ribbon should be a bright color.

3.8 Seasons. The season of the year is important for new road construction. The best construction seasons are summer and fall and the worst is spring. If it is absolutely essential that construction activities occur during the spring or during periods of heavy precipitation, the road will be completely surfaced with stone prior to use.

3.5 Roadway Width. Roads will meet the Standards of Class B Roads, per the Unpaved Forest Road Handbook Excerpt as attached, and is 14 feet in most cases.

4.0 Road Construction.

4.1 Cut slopes should not be steeper than 2:1 in soil.

4.2 Cut slopes should be properly stabilized immediately to minimize erosion.

4.3 Temporary erosion control measures such as hay bales, filter fabric, etc., should be used during construction to minimize erosion and sedimentation problems until permanent control measures can be established.

4.4 Surfacing. During Spring construction activities or during periods of wet weather roads will be surfaced with rock or stone. The amount of surfacing may vary from 6" to 8" depending on anticipated traffic use, soil conditions, and the use of a filter fabric.

4.5 Road embankments should be built of stable materials. The use of filter fabric may be considered as support material for low strength or wet yielding areas. Embankments should be properly sloped and stabilized immediately to prevent erosion.

4.6 Road surfaces should be sloped for drainage and safety.

5.0 Road Drainage.

5.1 The drainage of the access road will be the single most important factor in keeping the road passable and erosion and sedimentation to a minimum.

5.2 Where diversion ditches are necessary, provisions must be made to divert the water across the road at frequent intervals by means of culverts. The use of filter fabric is also effective and cost saving.

5.3 Outsloping the entire width of road towards the fill bank will reduce the number of cross drainage structures needed. However, an outsloped road needs to be constructed with just enough outslope to drain water, generally 1/4 inch to 3/8 inch to the foot. Outsloped roads can be very dangerous when they become wet and slippery or frozen and icy.

5.4 Insloping the road toward the cut bank may be done to prevent erosion and is much safer for truck travel. An insloped road does require the installation of adequate culverts or cross drainage structures or parallel ditches.

5.5 Recommended distances between culverts or cross drains:

ROAD GRADE	SPACING
2-5%	300-500 FT
6-10%	200-300 FT
11-15%	100-200 FT
16-20%	100 FT

5.6 The outfall of all culverts and cross ditches shall be protected with energy dissipaters such as rip-rap or some type of erosion control measures.

6.0 ROAD MAINTENANCE

6.1 Roads must be maintained in such a manner that the required and approved design standards are met throughout the life of the entire transportation facility including surface, approach structures, erosion control devices, cut and fill sections, and any traffic control devices as are necessary for safe and efficient utilization of the road. Culverts must be inspected regularly to insure they are clear of debris. Ditches should be clear of brush. Roads must be graded to maintain the road crown to keep water off the road.

7.0 Road Gates may be required on some access road to protect the road surface during wet weather. Attached is one approved design. Other designs may be submitted to the Regional Forester for his approval. Cable gates will not be allowed at any time.

8.0 WELL SITE STANDARDS

8.1 The well site will be constructed such that water will be drained away from the site.

8.2 The well site will be rough graded as soon as possible after completion of the drilling. All drilling pits will be filled in with soil. The site must be restored to final slope, seeded and mulched as soon as weather permits.

8.3 The tank/tanks required for gas or oil production must be contained within a dike which will hold 1.5 times the capacity of the tank/tanks. Provision must be made to remove the surface fluid.

8.4 All production equipment (tanks, dryers, well heads, pumps, etc.) must be painted as soon as possible after placement on state land.

8.5 The well site and production equipment must be maintained in such a manner that the required and approved design standards are met through out the life of the entire production facility.

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UNPAVED FOREST ROAD HANDBOOK

CHAPTER 100 - STANDARDS

132 - CLASS B ROADS. Permanent unpaved roads, with limited surfacing and drainage, and not designed for all-weather travel. There should be one mile of Class B road per 500 acres of State land, and no State land should be more than one-half mile from a Class B road or public highway.

140 - DESIGN STANDARDS.

TABLE NO. 1

	FOREST ROAD CLASS	
	CLASS A	CLASS B
TRAFFIC LANES	1*	1
VEHICLES/HOUR	3-20	1-5
DESIGN SPEED (MPH)	20-30	15-20
MIN. CURVE RADIUS (FT.)	100	50
MAX. GRADE - PITCH	12	15
" " - SUSTAINED	10	10
WIDTH (FT.) - ROADBED	20	14
" " - SURFACING	16	--
" " - BRIDGES	16	14
MIN. BRIDGE LOADING	H15S12	H15S12
TURNOUTS	INTERVISIBLE - NOT MORE THAN 1000 FEET APART	

* Two lanes will be provided on all horizontal and vertical curves having stopping sight distances of less than 200 feet.

150 - TURNOUTS. Turnouts on all single lane forest roads shall be intervisible and not over 1,000 feet apart.

151 - TURNOUT SPECIFICATIONS. Class A roads. Turnouts on Class A roads shall be at least 100 feet long and 10 feet wide; the tapered end sections should be at least 50 feet long, as shown in Figure 1.

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UNPAVED FOREST ROAD HANDBOOK

CHAPTER 100 - STANDARDS

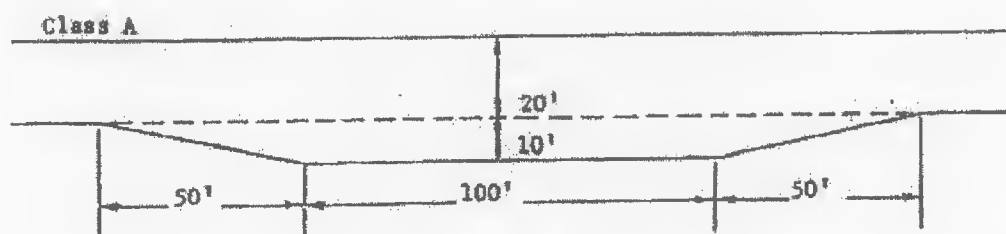


Figure 1

152 - TURNOUT SPECIFICATIONS. Class B roads. Turnouts on Class B roads shall be at least 75 feet long and 10 feet wide; with tapered ends at least 40 feet long, as shown in Figure 2.

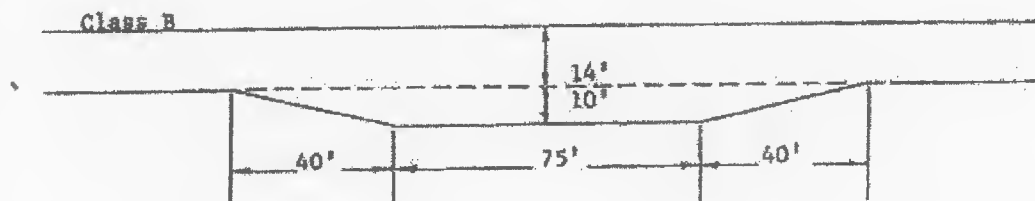


Figure 2

160 - STREAMS. Roads will not be located in stream beds. Roads which parallel streams shall have a filter strip at least 150 feet wide between the road and the stream.

170 - SECTIONS. Typical grading sections are shown as follows:

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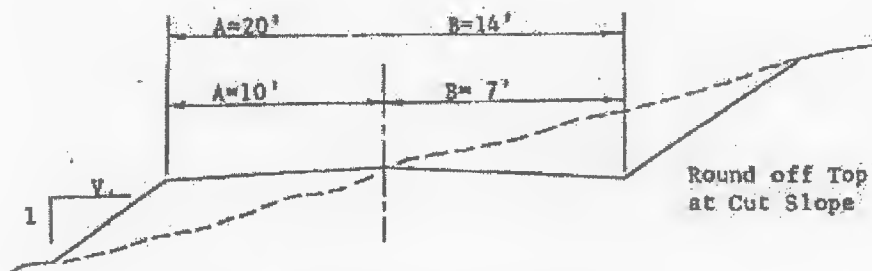


Figure 3 - Side Hill Section

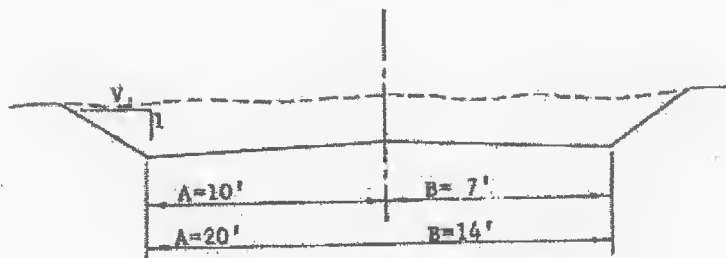


Figure 4 - Through Cut Section

Legend for Figures 3-7

- Existing Ground
- V - Variable
- A - Refers to Class A Roads
- B - Refers to Class B Roads

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CHAPTER 100 - STANDARDS

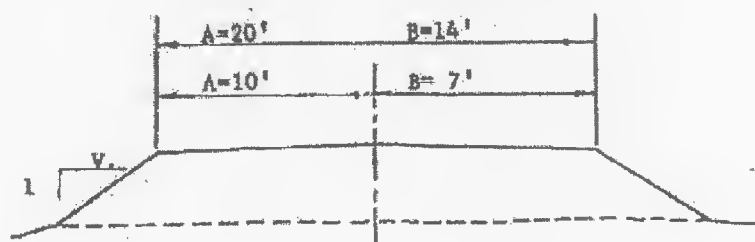


Figure 5 - Fill Section

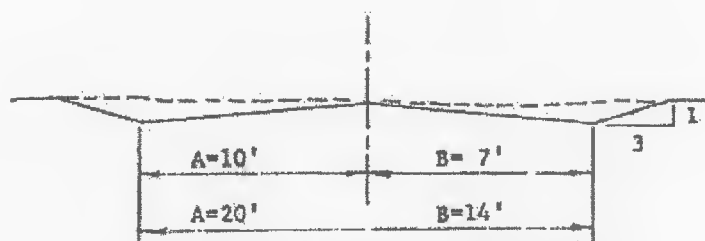


Figure 6 - Section on Flat Ground



Figure 7 - Section on Flat Ground
(Where Additional
Elevation is needed
for Drainage)

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UNPAVED FOREST ROAD HANDBOOK

CHAPTER 500 - PROJECT PLANS

TABLE NO. 4

Size of Round Culvert Pipe
Needed for 2 1/2" per hour Rainfall
based on Talbot's Formula - $A = \frac{\sqrt{H^3}}{C}$
(Adapted from "Permanent Logging Roads" Handbook, U.S. Forest Service)
A = Area of Drainage basin
C = Constant Factor based on Slope, soil
absorptive capacity, and cover
H = Area in Sq. Ft. of Waterway Required

Acres in Drainage Area	Impervious 100% Run-off	Steep Slopes Heavy Soils	Mod. Slopes Heavy to Lgt. Soils-Dense Cover	Gentle Slopes Agric. Soils and Cover		Flatlar Pervious Soils	
	C=1.0	C=0.80	C=0.70	C=0.60	C=0.50 C=0.40	C=0.30	C=0.25
2	15"	15"	15"	15"	15"	15"	15"
4	18"	15"	15"	15"	15"	15"	15"
6	18"	18"	18"	15"	15"	15"	15"
8	24"	24"	18"	18"	18"	15"	15"
10	24"	24"	24"	18"	18"	18"	15"
20	30"	30"	30"	24"	24"	24"	18"
40	42"	36"	36"	36"	30"	30"	24"
60	48"	42"	42"	42"	36"	36"	30"
80	54"	48"	48"	42"	42"	36"	30"
100	60"	54"	54"	48"	48"	42"	36"
150	72"	66"	60"	54"	54"	48"	42"
200	78"	72"	66"	60"	60"	54"	48"
250	84"	78"	72"	66"	60"	54"	48"
300	90"	84"	78"	72"	72"	60"	54"
400	8'x7'	90"	84"	78"	72"	66"	60"
500	10'x7'	9'x6'	90"	84"	78"	72"	60"
700	10'x9'	10'x7'	10'x6'	10'x5'	90"	84"	72"
1000	10'x12'	10'x9'	10'x8'	10'x7'	10'x6'	90"	78"

NOTE: No Culverts Smaller Than 15" Will Be Used.

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CHAPTER 600 - EROSION CONTROL

610 - INTRODUCTION. Construction operations generate conditions which require methods to prevent or reduce erosion of slopes. The areas involved include side slopes, road bed, shoulders, and back slopes. Erosion will increase the costs of maintenance to correct the condition, and cause deposits of silt in streams.

620 - EROSION CONTROL METHODS.

621 - SLOPE ANGLE. Flatter slopes are less likely to erode, and they permit a quicker establishment of vegetative cover. Therefore, within the limitations of economic construction, the flattest feasible slopes will be used. The tops of cut slopes should be rounded to reduce erosion, and to improve appearance.

622 - VEGETATIVE COVER. Vegetative cover, including perennial grasses, low shrubs and/or legumes may be planted on the slopes to bind the soil. A mulch of straw or wood chips blown on the slopes will retain moisture and help vegetation to become established. In selecting species for planting, the recommendations of the Regional Supervisor of Fish and Wildlife will be sought to insure proper consideration for wildlife values.

623 - RIP-RAP. Where the slope is likely to come in contact with flowing water, loose rock rip-rap protection is needed to prevent erosion. This is particularly the case with culverts, and along bridge wingwalls.

624 - ROAD CROWN. Roads will be crowned 1/4 inch per foot of road width to drain surface water from the road center towards the shoulders.

625 - STREAMS. Roads will not be constructed in stream channels. A filter strip with a minimum width of 150 feet will be maintained where a road parallels a stream. When required, stream crossings will be made at right angles, insofar as possible, to minimize siltation and to disturb the stream as little as possible.

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CHAPTER 700 - CONSTRUCTION

780 - SURFACE DRAINAGE. Road crowns, ditches, culverts and bridges should be designed to take care of surface drainage. A properly crowned road will conduct water to the ditch line and prevent rutting. Ditches carry water alongside the road until it reaches a culvert, a lead-off channel, or a stream. Ditches should have not less than a 1% slope to drain properly.

781 - CULVERTS. Culverts will take care of most surface drainage until the drainage area exceeds 400 acres. Waterway requirements in excess of 44 square feet will call for a bridge to handle the flow. Use Table No. 4 to calculate the size of drainage structure required. Culverts will be required at low points, stream crossings, and spaced not over 300 feet apart on side hill cuts to provide cross drainage.

781.1 - Culvert Installation Details.

- a. Culverts should be installed to equal or exceed slightly the slope of the stream or ditch which flows through the culvert.
- b. Put in a cushion of sand or fine gravel to minimum depth of 6 inches in the bottom of the trench dug for the culvert. Put grade stakes at upper and lower end (minimum slope 2%). Make center of cushion approximately 2 inches higher than grade to allow for settling of the pipe when covered.
- c. Culvert should be 40% of length uphill from center line; 60% downhill from center line.
- d. Fine sand or gravel should be tamped in all around and over the culvert. Pipes should be covered with fill to a depth at least equal to their diameter.
- e. Culvert pipes should be angled downhill from a right angle on side hill drainage.
- f. Add two feet to estimated length of culvert pipe needed.
- g. if road crosses a stream at an angle, culvert pipes should be skewed to be in line with streamflow.
- h. Avoid twin culverts. Use a larger size single culvert, or "squash" type culvert if elevation is a problem.

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CHAPTER 700 - CONSTRUCTION

- i. Make drop inlets or catch basins at culvert inlets to intercept water, and to protect inlet. Use dry masonry or concrete masonry as situation requires. Culvert outlets should be protected by culvert headwalls or stone rip-rap. See Figures 16 and 17.

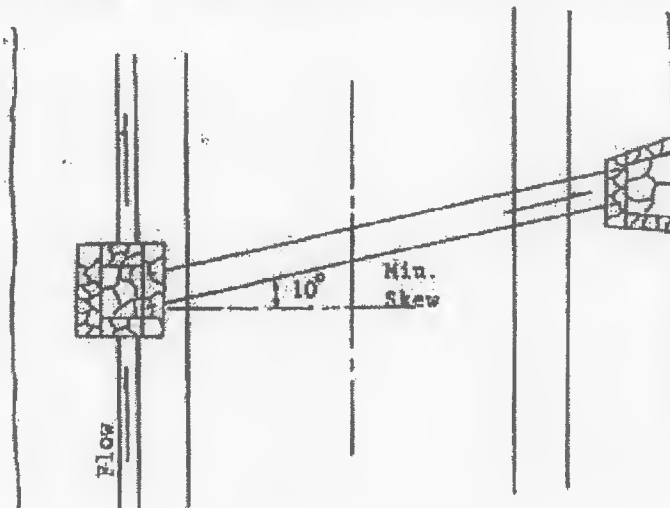


Figure 16 - Plan

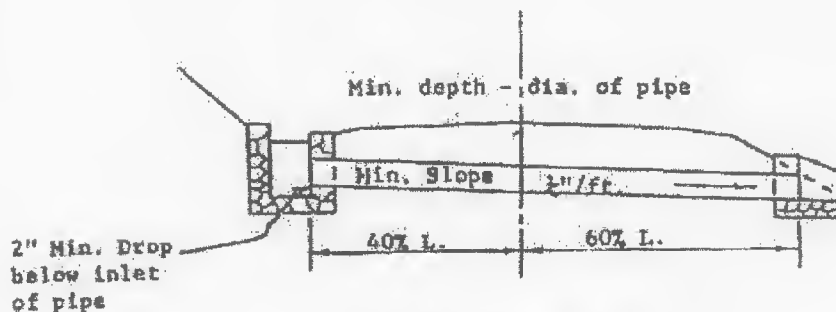
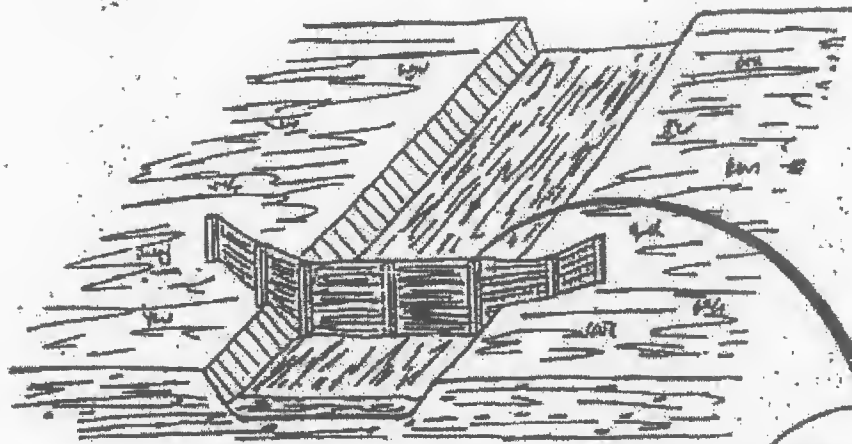


Figure 17 - Section

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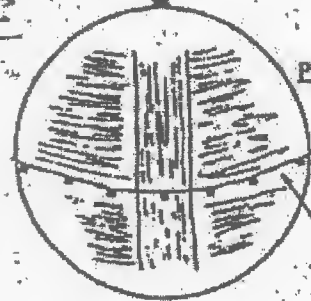
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APPENDIX SECTION 27
 SEDIMENT TRAPPING FACILITIES
 DITCH INSTALLATION

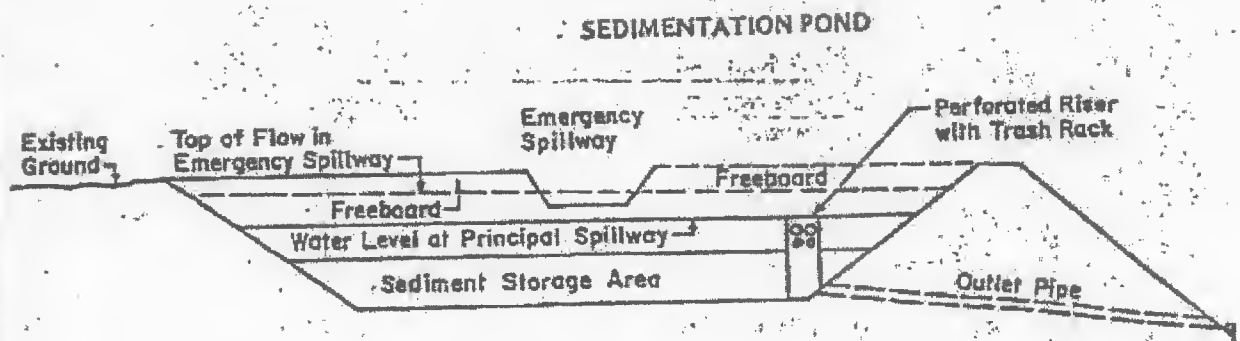


NOTE:

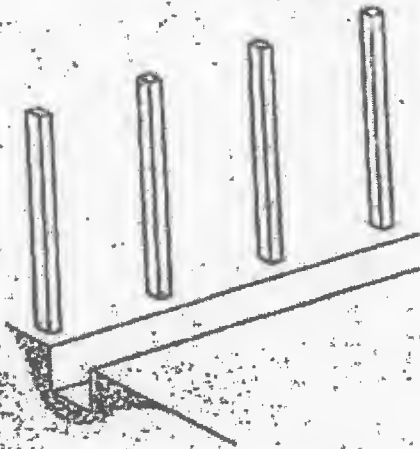
Filter fabric should be installed in an arc across the ditch and extended a sufficient distance out the sides so as to prevent water from flowing around the ends of the filter fabric fence.



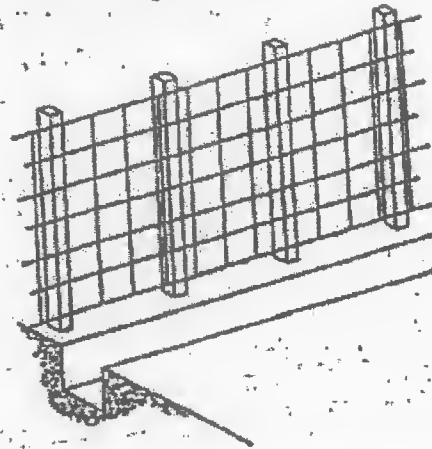
PLAN VIEW



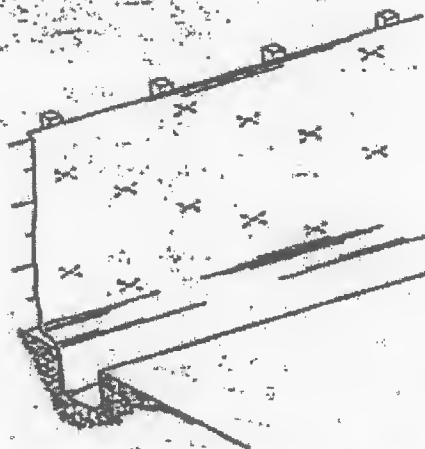
APPENDIX SECTION 2
 FILTER FABRIC INSTALLATION
 SEDIMENT FENCE CONSTRUCTION



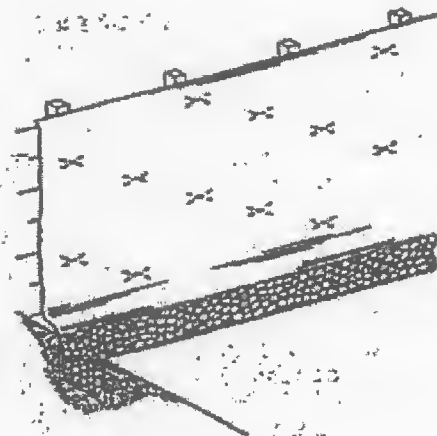
Support poles should be set and a minimum 6-inch trench dug to serve as a toe-in for the fabric.



A fencing material—wire mesh, wood slats, etc., if required, is then affixed to the poles. This support system acts as the framework for the filter fabric.



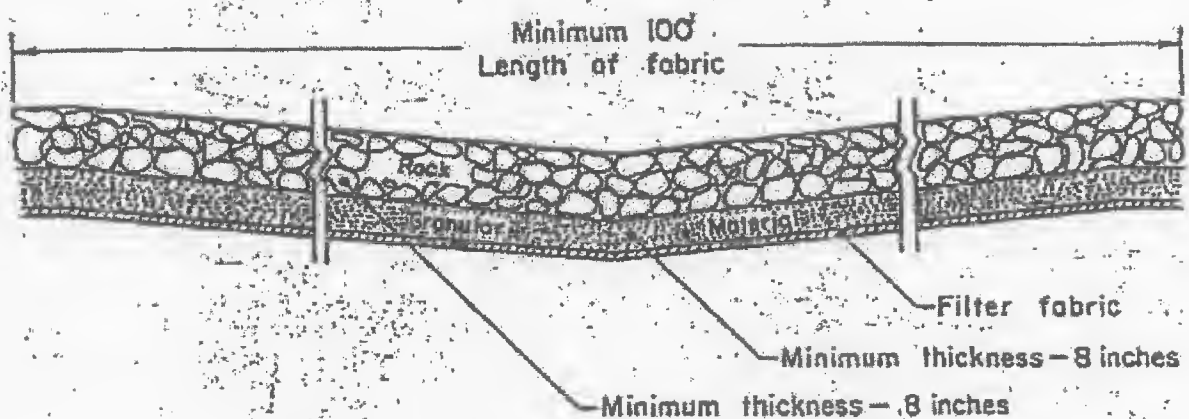
A sufficiently wide strip of filter fabric is then fastened to the fence support system with staples or nails. Leave a 12-18 inch wide bottom strip to line the trench.



The lined trench is then backfilled to complete the toe-in.

Some filter fabrics when exposed to direct sunlight, will degrade in several months. (Example: Untreated polypropylene is affected by UV). Know your material; engineer your project.

APPENDIX SECTION
DRAINAGE DIP
CONSTRUCTION WITH FILTER FABRIC AND ROCK SURFACE



PROFILE

1. Construction of dips using filter fabric and rock would keep dips open and prevent rutting of the dip area.
2. Similar construction techniques could be used for the access road for sections: 100' each side of a stream crossing and last 100' to 200' before entering onto public highway.
3. If the operator is planning on adding any stone bases on the access road, filter fabric should be given consideration. Use of filter fabric would reduce the thickness of the rock base needed and would prove to be a cost effective measure.
4. Wheel loading design considerations can be obtained from manufacturers literature.

Typical sections must be keyed to well site locations on the multiple-well site map.

Legend and symbols which may be used on the map.

 Road & utility corridor

 [WOODLAND] Site cover

 Spring or seep and drainage

 Drainageway

 Intermittent stream

 Excavated area

 Fill area

 Access road entrance to well site

 Corridor break

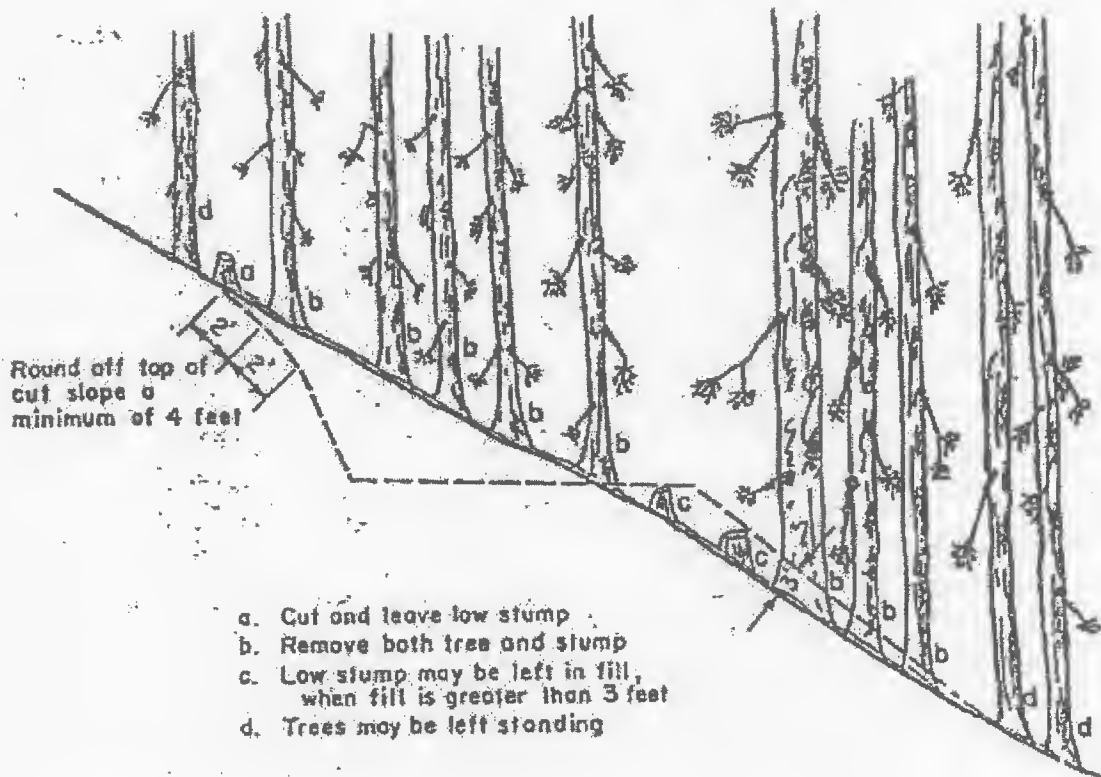
 Boundary of well site

 Well location

Identification and location of erosion and sedimentation measures and facilities on the map.

The planned location of the erosion and sedimentation controls can be marked on the map with an item number and directional arrow. (Example: a planned mulched area could be identified with a limit line and number or an off side number and arrow.

ACCESS ROAD CONSTRUCTION CLEARING FOR CUT AND FILL ROAD



1. Construct road so that hauling will be on solid ground, not on fill.
2. Inslope from fill to cut shall have a fall of not less than $1/4"$ and not more than $3/8"$ per foot.
3. Drainage water shall be carried across road to fill slope by intercepting dips or culverts.

SLOPE RATIOS

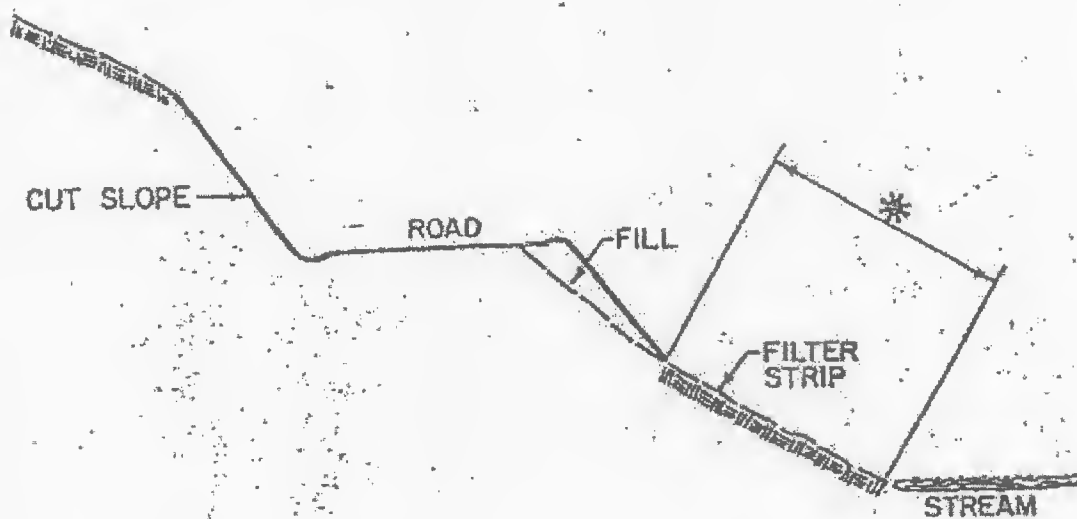
Cut slopes should not be steeper than:

- (a) $1/2 : 1$ in rock
- (b) $2 : 1$ in soil

Fill slopes should not be steeper than:

- (a) $1 : 1$ when constructed with rock.
- (b) $2 : 1$ when constructed with soil.

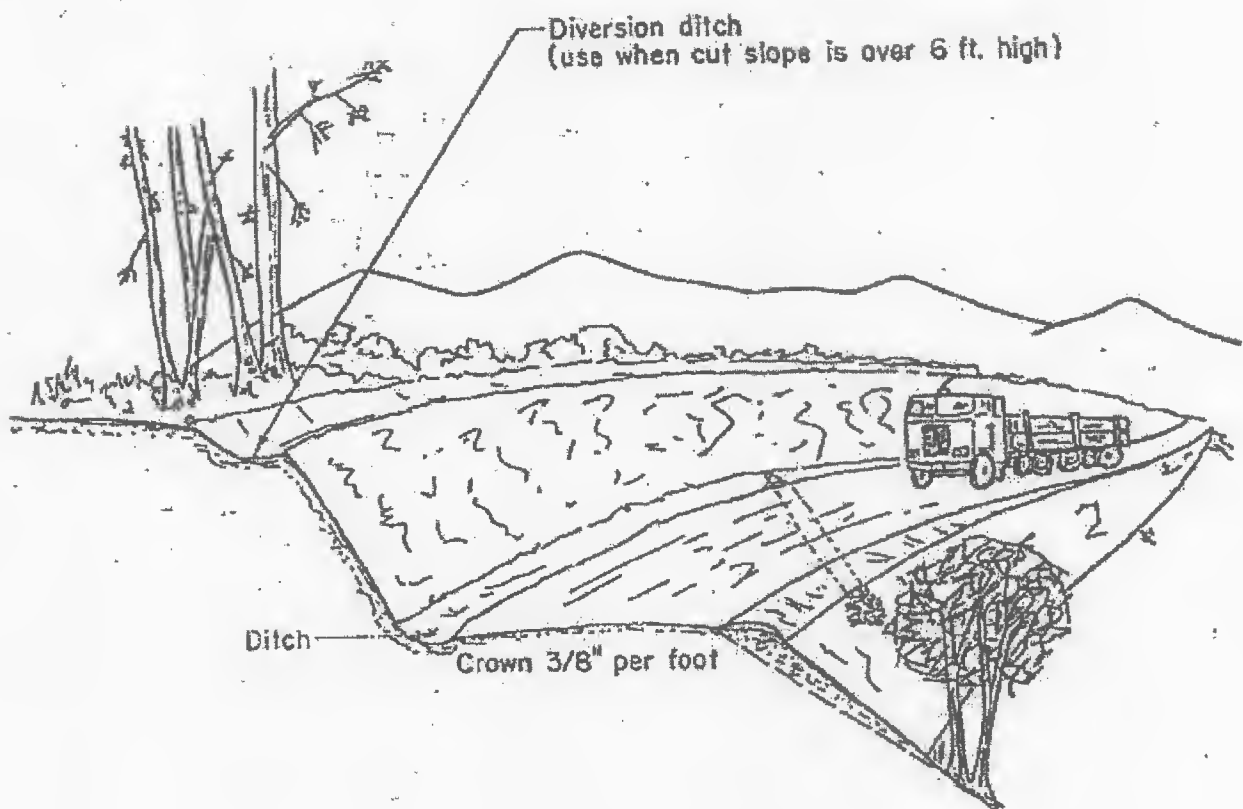
SOIL STABILIZATION FILTER STRIP FOR ROADWAY



* FILTER STRIP WIDTH CHART

<u>SLOPE OF LAND BETWEEN ROAD AND STREAM</u>	<u>WIDTH OF FILTER STRIP</u>
<u>PERCENT</u>	<u>FEET</u>
0	25
10	45
20	65
30	85
40	105
50	125
60	145
70	165

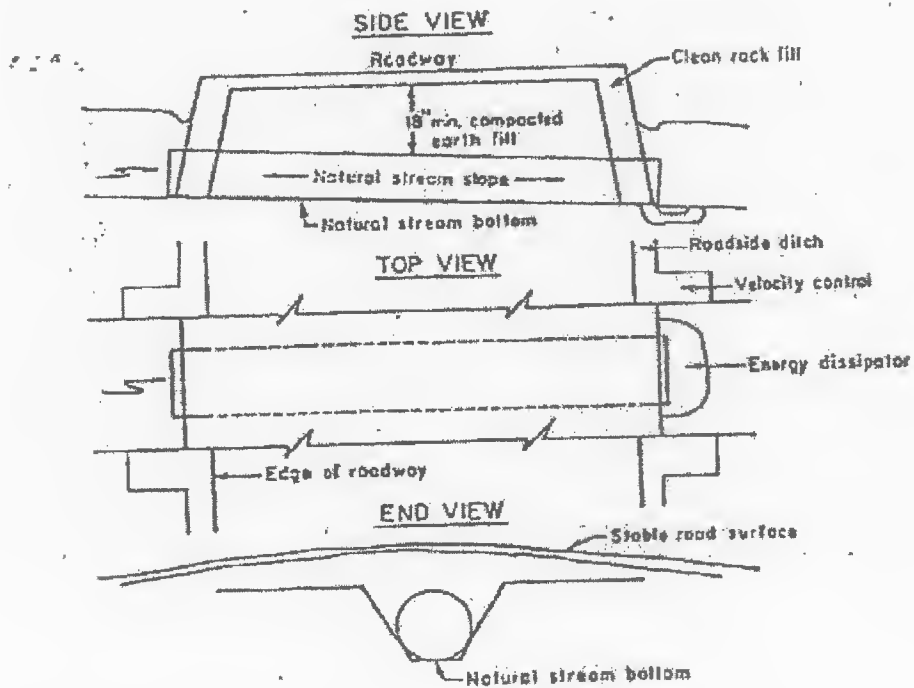
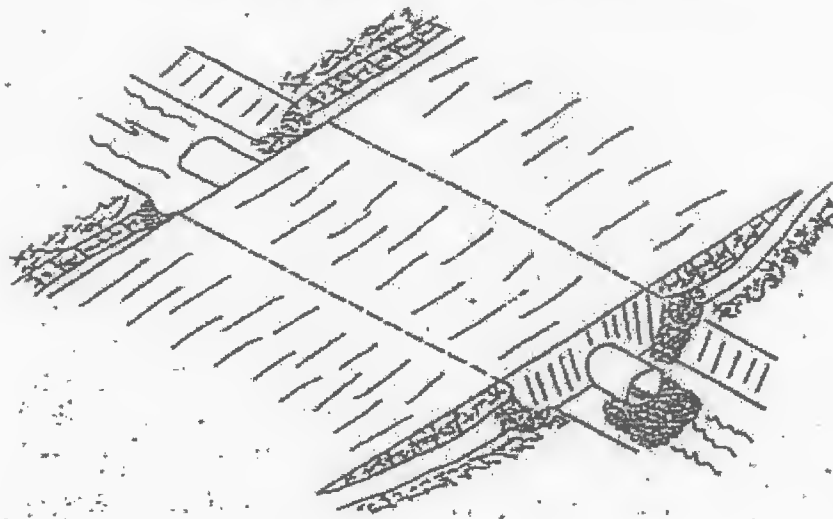
ROADWAY DRAINAGE
CROWNED ROADWAY



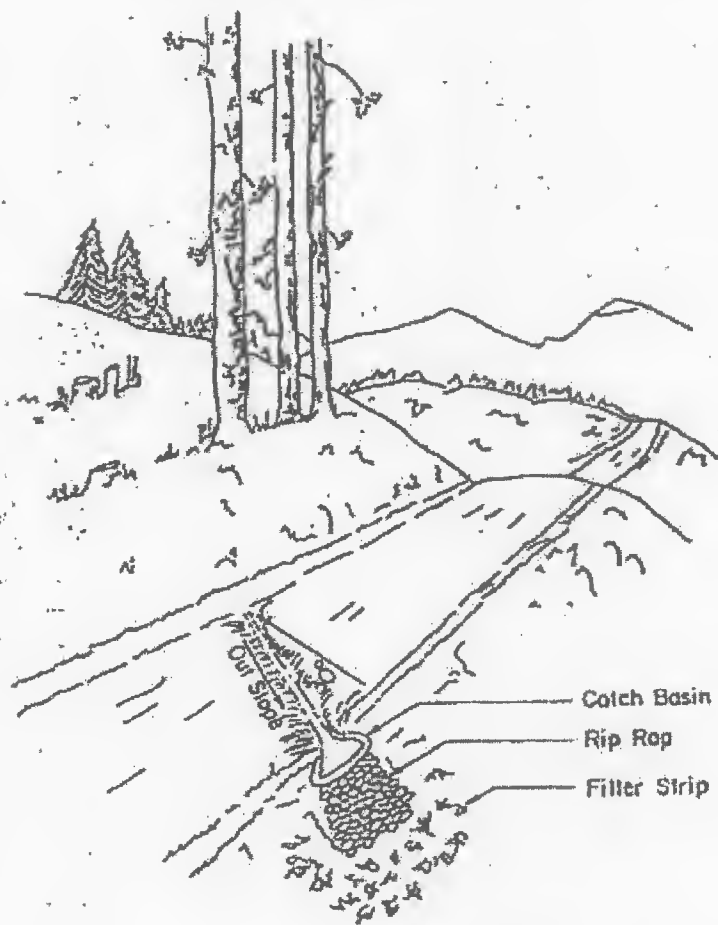
ALL SLOPES SHOULD BE SEEDED AND MULCHED
AFTER CONSTRUCTION

Exposed soil areas must be stabilized immediately after the final earthmoving has been completed or where the activity ceases for more than 20 days.

APPENDIX SECTION
 CULVERT INSTALLATION
 EROSION AND SEDIMENTATION CONTROLS



APPENDIX SECTION 1.1
WATER BAR OR DRAINAGE DIP WITH ENERGY DISSIPATOR
FOR RETIREMENT OF ROADS.



DRAINAGE DIP SPACING CHART

ROAD GRADE	SPACING
Percent	Feet
2	250
5	135
10	80
15	60
20	45
25 (And Greater)	40

Commonly used erosion and sedimentation measures and facilities with a numbering system. Other systems or methods of identification may be used.

- [1] Natural Filter Area
- [2] Filter Fabric Sediment Fence
- 3 Sediment Trap
Dumped Rock Dike
- 4 Sediment Trap
Basin
- 50 Sediment Pond
Earthen Dike & De-watering Device
- [6] Mulch
- [7-7] Diversion Ditch
- [8-8-8] Interceptor Ditch
- [9] Rock Rip Rap
- [10] Surface Stabilization
- 11 Culvert or Bridge
- [12] Level Spreader

Information to be provided in the narrative for well sites.

Size of cleared area length and width.

WELL SITE PLAN



APPENDIX

GATES & BARRIERS CONSTRUCTION GUIDELINES

I. BACKGROUND

Gates are needed at many Department facilities and land use areas to prevent unauthorized or undesirable vehicular access. Access cannot be permanently sealed to these areas in order to allow Department access for:

-- Maintenance to land, barrier dams, impoundment dams, buildings, flood protection structures, campgrounds, interior structures and other Department facilities.

-- Fire suppression or pre-suppression activities.

-- Timber and firewood sales.

-- Law enforcement activities

-- Administrative activities.

Accidents involving gated accesses have occurred on State-owned lands when these lands are used by operators of snowmobiles, all-terrain vehicles or other such motorized equipment.

Since gates and barriers cannot be totally eliminated, it is imperative that they be properly constructed with safe warning signs.

II. PURPOSE

The purpose of this guide is to assist the regions in the proper construction or replacement of barriers and gates to minimize the possibility of future accidents. These guidelines will help standardize construction of gates and barriers throughout the State, with the ultimate goal of making them all highly visible, located properly and installed with warning signs wherever possible.

III. NEED FOR BARRIERS

Decision-Making Process

Regional Operations' staff should discuss with the appropriate Program if an existing barrier can be either permanently removed or, in the case of a new gate, if it is absolutely needed. Wherever possible, gates should be avoided or removed. If access can be permanently sealed, a permanent barrier should be constructed. If a removable barrier is necessary, it should be determined if it needs to be closed full time or seasonally.

IV. PERMANENT BARRIERS

Permanent barriers should be erected by mounding earth, ditching, placing large boulders or a combination of these. Warning signs should be installed unless the access roadway to the barrier has returned to a totally wooded state, thereby precluding vehicular travel to or from the barrier site.

V. REMOVABLE BARRIERS

Removable barriers should be constructed to meet the following criteria:

- Be constructed with enough bulk to be readily visible.
- Be visible above maximum snow buildup if left closed during winter.
- Where possible, be visible a minimum of 100 feet approaching from either direction.
- Have a reflective STOP sign on both sides.
- Have advance warning signs where practical(see sign section).

Barriers and their mounting supports should be painted with high visibility yellow paint unless they are of such construction or such obvious location that visibility is not a problem under any circumstances. Under certain conditions, aesthetics may preclude the need for this painting scheme and reasonable judgment should be exercised in these cases.

VI. SIGNS

Each sign should fulfill a need, convey a clear and simple meaning and give adequate time for response. Factors to consider are placement, maintenance and uniformity. The following guidelines should be adhered to:

-- Advance warning signs should be on the right side of the road or access way and be located on both directions of travel to the barrier wherever possible.

-- Advance warning signs should be three feet to six feet from the edge of the access surface.

-- All signs should be above normal snow depth if the barrier is closed during winter.

VII. MATERIALS AND CONSTRUCTION DETAILS

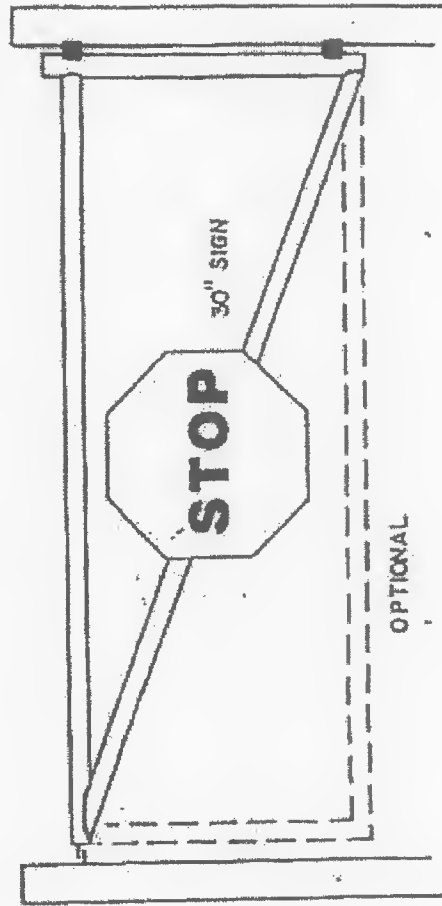
To promote uniformity, both the paint and the warning signs are stocked in Central Stores and are available to all regions.

-- Stop Signs - standard 30" D.O.T. stop sign. It will be red and white and will be faced with high intensity reflective material.

-- Advance Warning Signs - 2' x 2' with STOP BARRIER AHEAD lettered on them. Standard D.O.T. colors, yellow background with black letters and faced with high intensity reflective material.

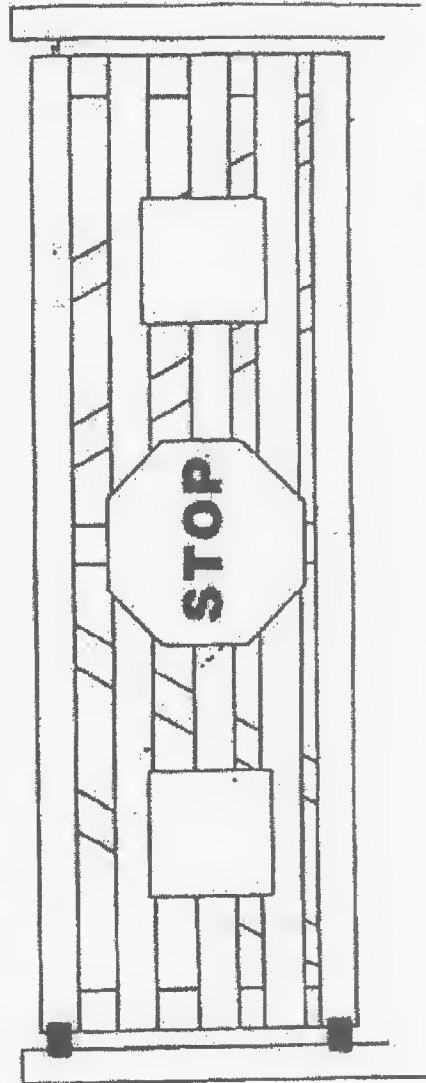
-- Red Hazard Panels - 18" square, red in color and faced with high intensity reflective material. They will be used on gates wider than 10' and all other locations where additional warning signage is felt to be necessary.

WELDED PIPE GATE



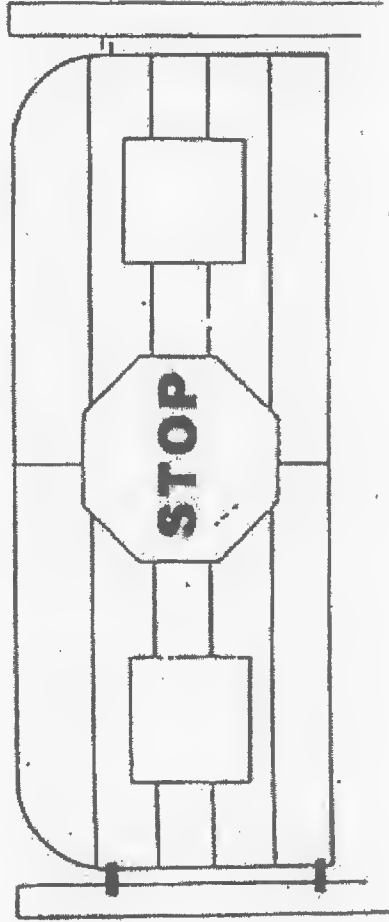
RED SIGN W/WHITE LETTERS
YELLOW PIPING

FIVE PANEL STOCK GATE 6-18' LONG 4' HIGH

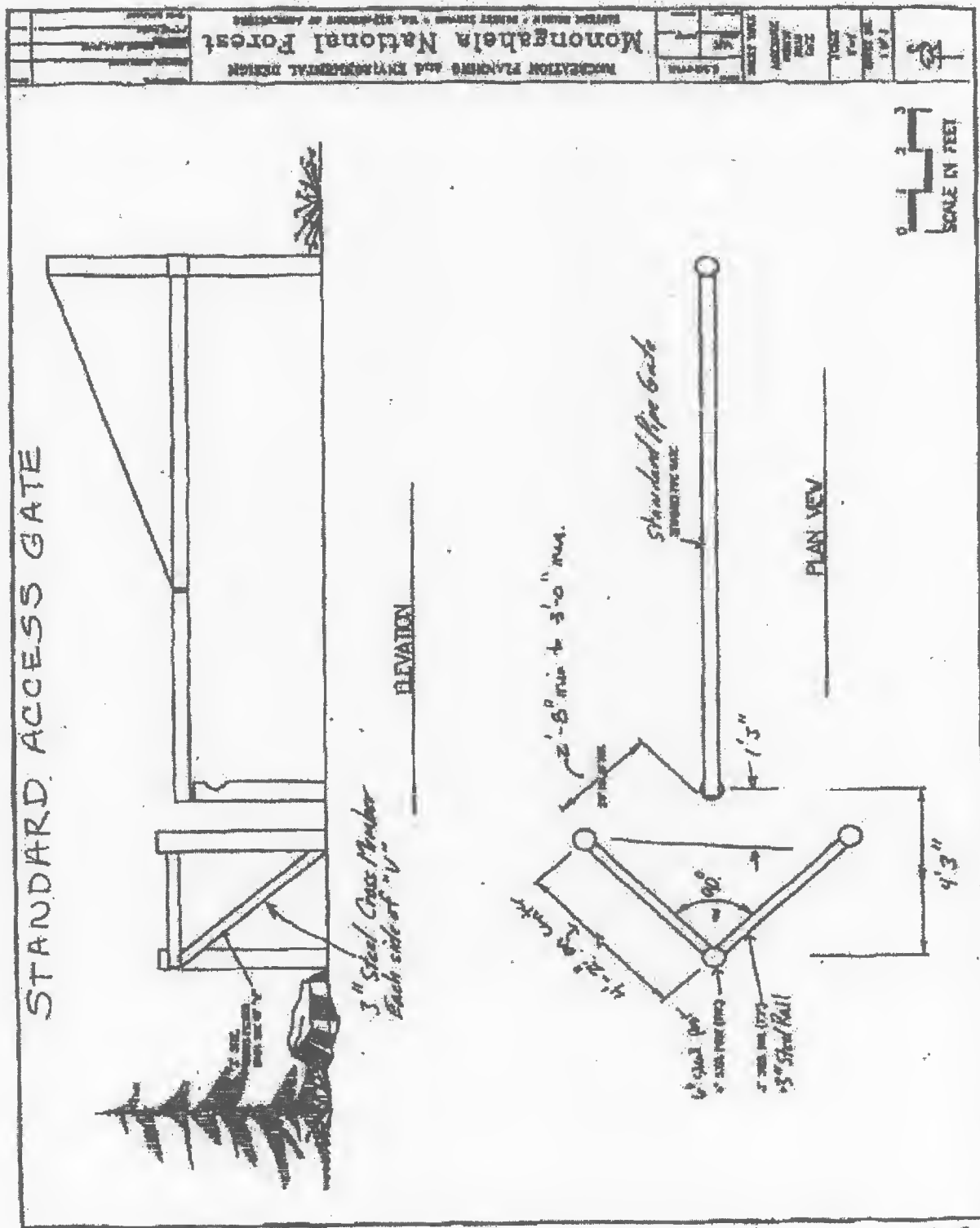


RED SIGN W WHITE LETTERS
RED HAZARD PANELS
YELLOW POSTS

STOCK PIPE GATE 6-18' LONG 4' HIGH



RED SIGN W WHITE LETTERS
YELLOW POSTS
RED HAZARD PANELS
YELLOW GATE



Schedule 2